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## **APPENDIX Q**

Alternatives Assessment

## **APPENDIX R**

Community Impact Study

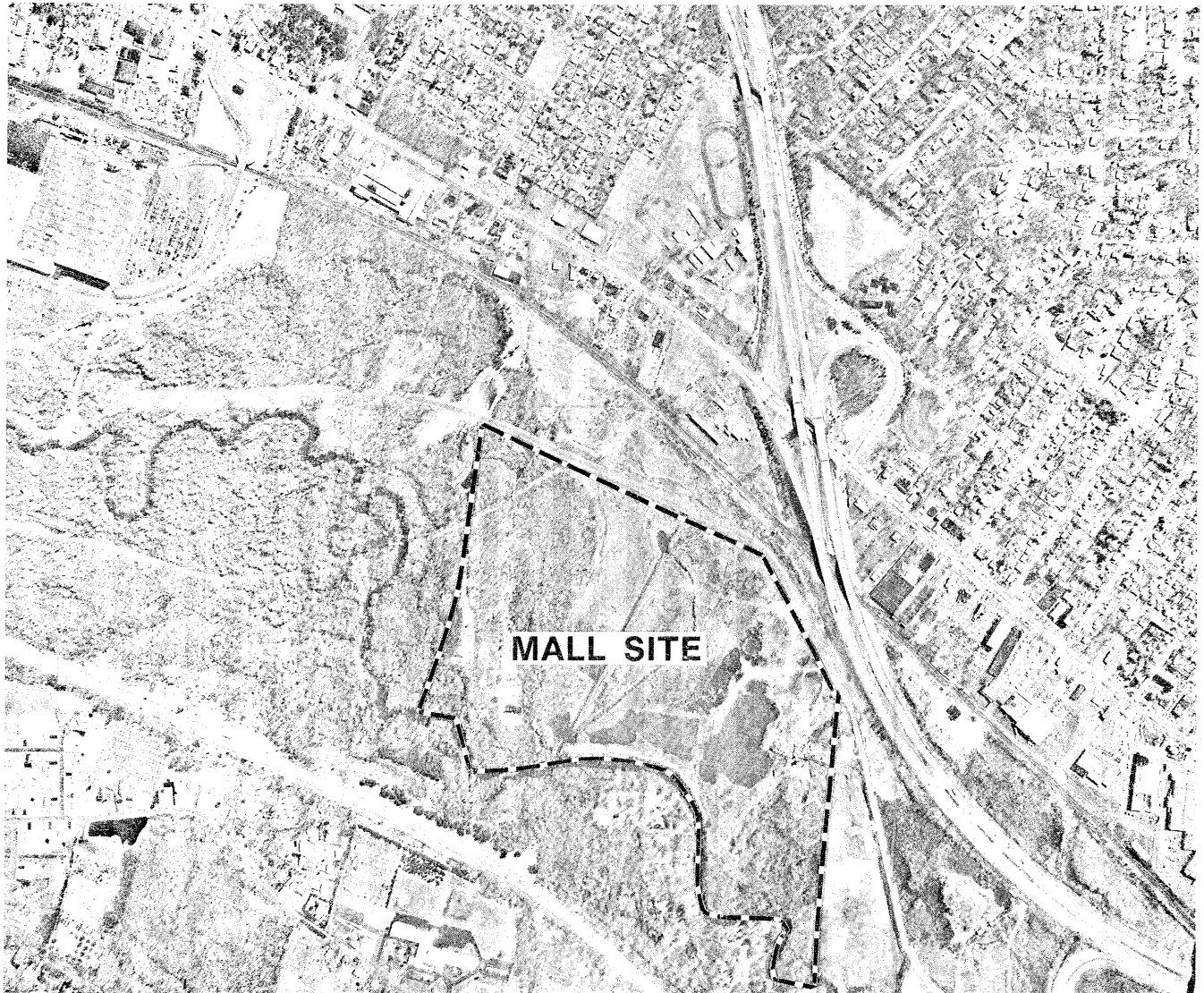
## **APPENDIX S**

Habitat Evaluation Procedures (HEP) Report

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# **NORTH HAVEN MALL**

**NORTH HAVEN, CONNECTICUT**



1981



**US Army Corps  
of Engineers**

New England Division

## Appendix Q

### Alternatives Assessment

The material contained in this appendix was prepared for Mall Properties, Inc., by Gladstone Associates in association with Parsons Brinkerhoff Quade and Douglas, Inc. It has been provided to the Corps of Engineers as information in support of application #13-79-561 for a permit under Section 404 of the Clean Water Act of 1977, and Section 10 of the River and Harbor Act of 1899.

APPENDIX Q:

ALTERNATIVES

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## APPENDIX Q:

### ALTERNATIVES

#### INTRODUCTION

##### Issues Addressed

The analysis of alternatives to the proposed North Haven Mall focused on five major categories of issues. These were:

- o First, the existence of any practicable and reasonably foreseeable alternatives for the provision of comparable retail services in the market area to be served by the proposed North Haven Mall was investigated. For this purpose, sites in and around the market area that have been suggested as potentially developable for regional level retail facilities were identified. Analyses were carried out to determine the practicality of serving the region's retail demands through development of a comparable retail center at an alternative single-site location, or by expansion of existing regional shopping centers in the market area.
- o Second, following the evaluation of single-site options, possibilities for practicable alternative means of providing comparable retail services at two or more locations were investigated.

- o Third, alternative configurations for the proposed North Haven Mall were considered. Assessments were conducted concerning the viability of providing a reduced scale of retail activities at the proposed North Haven Mall and the practicality and efficacy of optional project designs, such as decked parking, multi-level structures or alternative layout configurations, in reducing land requirements for the project.
- o Fourth, additional analyses were carried out in relation to the no-action alternative to assess the likelihood of various alternative uses of the site with the assumption that the North Haven Mall would not be constructed and to provide a comparative evaluation of environmental impacts for reasonably foreseeable alternative uses. Alternative uses considered in this analysis included industrial, commercial and office, residential, recreational and mining activities.
- o Finally, continuation of existing uses at the proposed site was addressed, with the assumption that the North Haven Mall project would not be implemented (the no-action alternative). Issues raised under this no-action scenario included evaluation of the environmental consequences for existing and expected future conditions at the site, analysis of regional retail market trends without the addition of the North Haven Mall and the implications of the no-action alternative on the future fiscal position of North Haven.

In order to conduct a conservative review of alternatives, this appendix assumed that potential alternative sites are available to the applicant for

provision of comparable retail facilities. In fact, such other sites are not generally available, since they are in private ownership and the applicant, a private-sector developer, lacks the ability to acquire such property. For the reader's information, the applicant has expressed the view that the sites discussed in this appendix are not feasible alternatives for its implementation.

#### Context of Comparison for Alternatives

Since one of the principal purposes of this discussion is to provide a basis for comparing the merits of the proposed action with any reasonable alternatives to it, an overview of the public benefits that are projected to flow from the construction and operation of the North Haven Mall is presented below.

As demonstrated in the retail impacts analysis (see Appendix L: Economics and Land Use), the proposed North Haven Mall would satisfy specific retailing public needs presently unserved by existing retail facilities in the New Haven metropolitan area. The proposed Mall or other comparable alternatives would provide a depth and variety of merchandise not presently available. The public need for such regional retailing is illustrated by the current annual loss of \$66 million in retail sales from the New Haven-West Haven Standard Metropolitan Statistical Area (SMSA) to retail centers outside of this economic region.

The proposed Mall or comparable alternative would promote an increased level of merchant competition, which would serve to improve retail services available to area consumers (see Appendix L: Economics and Land Use). In addition, this sharpened regional competition would tend to lower prices for goods and services to be purchased by consumers. The proposed Mall or a comparably

situated regional retailing facility would also serve the consuming public by reducing the number of miles travelled for shopping purposes, as a result of the wide range of merchandise, convenience in comparative shopping and central location.

In addition to the benefits discussed above, the proposed North Haven Mall or comparable retailing facilities in the Town of North Haven could respond specifically to at least three other aspects of public benefit. First, tax revenues generated by the proposed Mall would supply critical fiscal support for the Town of North Haven. Development of a Mall at the proposed site is in line with long standing land use and economic development plans formulated by the Town of North Haven. Through tax revenues, a Mall would help to maintain public services to residents of the town and help to maintain affordable levels of property taxes in the current period of cost inflation.

Second, a Mall would provide a center for community functions and social interaction. Additionally, Mall development would allow retail organizations to find suitable locations in the metropolitan area to compete in the regional market and to reach area consumers.

Finally, the construction and operation of a Mall would provide an economic boost to metropolitan New Haven as well as to the Town of North Haven. Mall construction would generate approximately \$21.8 million in wages for construction industry workers. Mall operation would create a net addition of at least 1250 to 1400 permanent jobs, which would in turn annually generate \$8.2 million to \$8.5 million in wages.

## SINGLE-SITE ALTERNATIVES FOR PROVISION OF COMPARABLE RETAIL FACILITIES

### Description of Investigation

The objective of the analysis of alternative sites was to identify alternatives to the proposed North Haven Mall which could be considered practicable and reasonably foreseeable options for providing comparable retail service to the Mall's market area. In this analysis, the options are not limited to those only within the capability of the applicant. The attempt here is to identify reasonably foreseeable alternatives that could satisfy the public's need for comparable retail services.

In order to facilitate the analysis of alternative sites and to limit in-depth analyses only to those sites providing feasible alternatives to the proposed North Haven Mall, the study process was designed to proceed in three distinct steps:

- (1) To assemble a list of reasonably identifiable candidate sites through interviews with public agency technical personnel, a representative sample of private retail interests, and a cross-section of real estate brokers, and to compile basic planning data for each candidate site;
- (2) To "screen" those sites through an evaluation process using criteria established principally through the scoping process to eliminate inappropriate sites which were not feasible for Mall development, or were similar in size and market coverage to other sites having fewer environmental and developmental constraints;
- (3) For sites found practicable and reasonably foreseeable in Step 2, to conduct an in-depth assessment of the affected environment and environmental consequences of development in a comparative manner.

In this analysis, the review of alternatives included possible expansions of existing retail centers, as well as possible sites for new development. In addition, each feasible candidate site was examined as a potential element of

a multi-site strategy, as well as a single-site option for provision of retail facilities comparable to the proposed North Haven Mall. The potential of development in the City of New Haven to serve as alternative was also examined.\*

Site Identification and Data Collection. Various real estate agents in the North Haven Mall market area were contacted to obtain a preliminary list of potential shopping center sites. This list was supplemented with sites mentioned at scoping meetings for the North Haven Mall Environmental Impact Statement. Government agencies and concerned citizens groups were also asked to provide any information regarding potential alternative locations for a regional shopping center. (Attachment A to this appendix lists contacts made.)

Once this list was prepared, one or more visits were made to each of the municipalities containing a potential site. During these visits, local officials were asked to add any other sites which they were aware of. The alternatives considered in this section represent a compilation of sites mentioned throughout the process. No sites were eliminated at this early juncture, and all potential sites were subjected to the preliminary investigation and screening process described in this appendix. The factual information presented in this appendix was derived from interviews with public officials, real estate brokers and private developers, review of government documents and on-site observations.

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\* Candidate alternative sites identified include many which are not situated in floodplains. Therefore, this appendix includes a discussion of practicable alternatives outside of floodplain areas in accordance with Executive Order 11988.



Screening Criteria. Twelve criteria were established for this screening process. The criteria were derived during the scoping process for the North Haven Mall EIS and conform generally with accepted retail development concepts. The principal criteria include: adequate site size, market coverage, access, land use compatibility, site infrastructure availability (utilities, etc.), legal and political constraints, and environmental impacts.

Since the purpose of the initial screening was to eliminate from consideration those sites that were clearly unsuitable to meet the project purpose, the criteria were grouped according to general importance, i.e., whether the failure to meet a certain criterion constitutes an "overriding problem," a "serious constraint," or might generate a potential impact which would require investigation and possible mitigation. Those sites with a severe "overriding problem" were eliminated from further consideration. The other criteria assisted in comparing the sites which then received further consideration.

The twelve criteria described below are grouped according to the classifications just described:

o Overriding Problems

Access sufficiency. This criterion requires that the candidate site be located so as to have convenient access to an interchange on a limited-access highway, the principal means of access for a shopping center, such that the traffic flow to and from the highway can be channeled effectively into the regional mall facility.

Compatibility with adjacent land uses. In order for a major retailing facility to succeed, it must be located either in an undeveloped area or in an area which currently contains commercial or mixed development. Location in a heavily industrialized area would result in substantial environmental and aesthetic disincentives and would jeopardize a new major retailing facility's success from a market standpoint. By contrast, placement of a full-scale regional

shopping mall in a fully developed residential area would produce a range of social and aesthetic impacts which may be unacceptable to the neighboring area and would likely render the project unfeasible.

Legal or political constraints (status). This criterion requires an assessment of the history of similar development efforts for a given site (if any), the problems encountered, resolutions obtained, and current ownership and legal status. If previous development of a site has recently been rejected or prevented (e.g. because of litigation) this is considered an "overriding constraint" as development clearly cannot be considered reasonably foreseeable.

o Serious Constraints

Site land use constraints. Controls on the development of a site such as zoning controls, can represent a serious impediment to development if a change is necessary. Federal and State permitting requirements may also constitute serious constraints upon development.

Market coverage or site location. A necessary characteristic of any potential alternative site, either simply or in combination with one or more other locations, is that it have an appropriate location to serve the same approximate trade area as that anticipated for the North Haven project. Without this characteristic, the site cannot provide comparable service to the trade area of the North Haven Mall and would not satisfy the needs for additional retail services in the metropolitan region.

Site size. For a single site alternative, candidate sites (other than one in the City of New Haven) for comparable retail facilities must be of sufficient size and appropriate configuration to accommodate those facilities with a design that can be both cost-effective and appropriate for a regional shopping development. Since multiple site alternatives have been considered as alternative means of providing comparable retail service, site size has not been categorized as an overriding criterion.

Infrastructure. A potentially serious constraint on the feasibility of constructing a regional shopping complex is the availability of sufficient water supply and sewer capacity. A lack of one or more of these types of utilities at or near the site location, plus a limited ability or disinclination on the part of the relevant authority to extend necessary trunk lines, would place a serious constraint on, and quite possibly prevent development. This constraint was not considered overriding, however, in that it is possible to construct "package treatment plants" for sewage treatment and pumping stations for water supply to service shopping center facilities.

o Other Constraints

The five remaining criteria -- flooding, water quality (wetlands\*), air and noise quality, historic and archaeological resources, and local traffic -- are types of natural or social environmental impacts which generally must be assessed when contemplating development of a facility such as the North Haven Mall.

Screening Procedures. The comparison of alternative sites using these criteria involved a determination of the number of different impacts and the severity of each. The application of these twelve criteria to the candidate sites has been iterative. The following procedures were carried out:

- o Each site was initially evaluated according to overriding variables such as transportation, access and legal or political constraints in order to quickly eliminate infeasible sites.
- o The remaining sites were evaluated, as appropriate, according to the other criteria (e.g. site location and size) to determine whether single sites would exist on which comparable retail facilities could be developed to serve the proposed North Haven Mall market area.
- o Finally, combinations of sites were considered to construct alternatives representing other means of providing comparable retail services. In these combinations of sites, additional sites were eliminated for reasons of redundancy; i.e., serving the same area at alternative locations with a comparably sized facility yet involving potentially greater environmental or implementation problems.

Identification of Candidate Sites

The location of each of the twelve candidate sites identified, through the process discussed above, are listed below. (See Figure 1.)

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\* The term "wetlands" is used in this report, as it is presented in Appendix B: Vegetation, Wetlands and Wildlife.

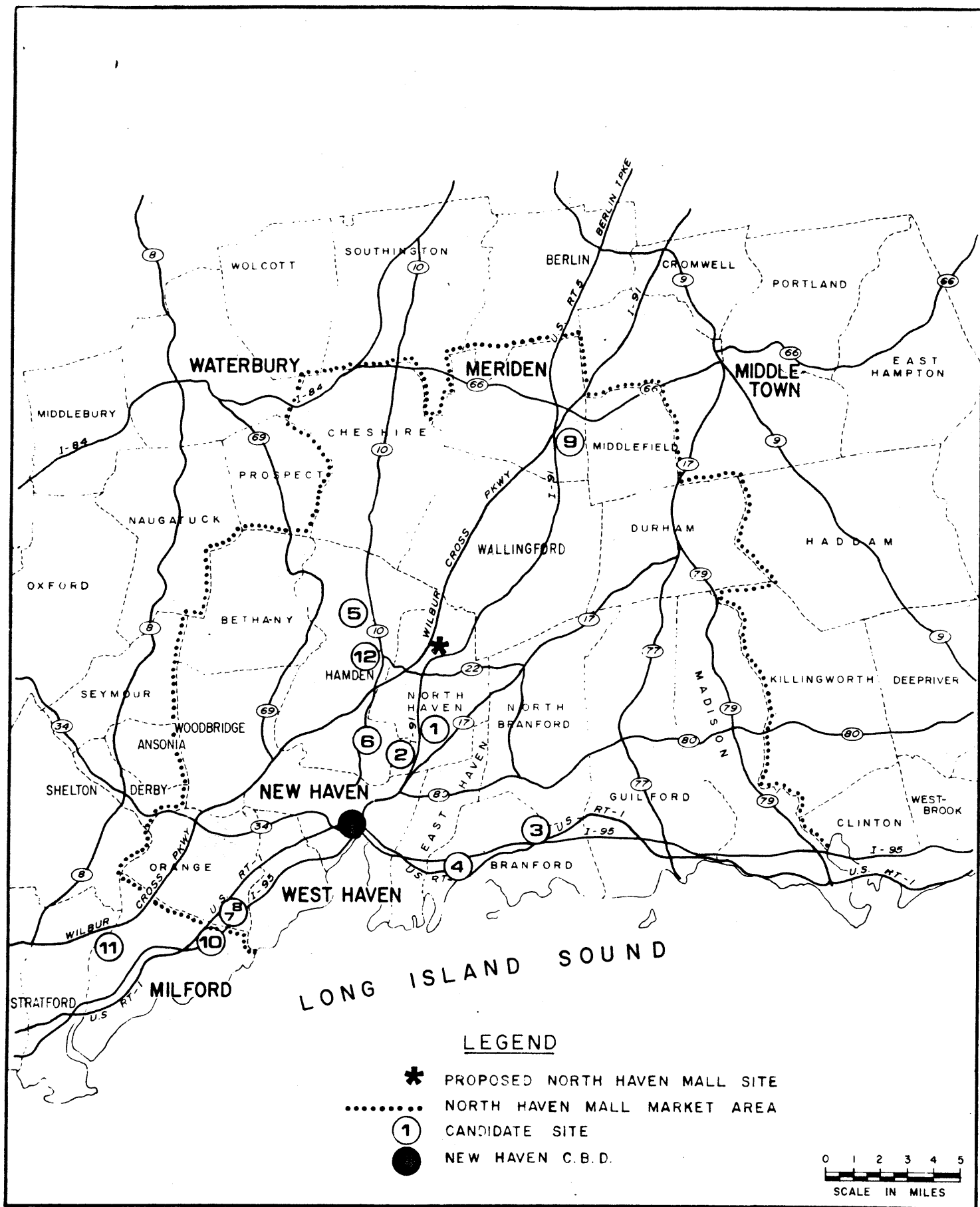
### Site Location

- (1) Bailey Road, North Haven
- (2) Terminal Road, North Haven
- (3) I-95, Exit 56, Branford
- (4) I-95, Exit 53, Branford
- (5) Evergreen Avenue, Hamden
- (6) Putnam and Morse Streets, Hamden
- (7) Marsh Hill Road, Orange
- (8) Lambert Road, Orange
- (9) Pomeroy Avenue and East Main Street, Meriden
- (10) Connecticut Post Expansion, Milford
- (11) Milford Parkway and Wilbur Cross Parkway, Milford
- (12) Magic Mile Expansion, Hamden

The potential for development in New Haven is discussed in more generic terms in a separate section following the analysis of the candidate sites.

### Initial Screening of Single-Site Alternatives

Each of the twelve candidate sites has been analyzed to ascertain the presence of potential marketing or developmental problems and other adverse characteristics as suggested by the twelve evaluation criteria presented earlier. The results of this screening analysis are summarized in the following two sections, and are set forth in comparative fashion in Tables 1 and 2. A more detailed discussion of information available on each candidate site is presented in Attachment B to this appendix.



NORTH HAVEN MALL

VALLEY SERVICE ROAD

NORTH HAVEN, CONNECTICUT

CANDIDATE SITE LOCATIONS



FIGURE 1

TABLE 1

## ALTERNATIVES SCREENING MATRIX

Site	Overriding Problems			Serious Constraints					Other Constraints					
	Access	Land Use Compatibility	Legal or Political Constraints (Status)		Land Use Constraints	Market Coverage or Locations	Site Size	Infrastructure		Flooding	Water Quality (Wetlands)	Air and Noise Quality	Historic and Archaeological	Local Road Improvements
1. Bailey Road North Haven	X	X	X		X		X			X	X	X		X
2. Terminal Road, North Haven	X	X	X		X					X	X	X		X
3. I-95, Exit 56, Branford			X		X	X	X	X						X
4. I-95, Exit 53, Branford	X	X	X			X	X					X		X
5. Evergreen Ave., Hamden	X	X	X							X	X	X		X
6. Putnam & Morse Sts., Hamden	X	X	X				X					X		X
7. Marsh Hill Road, Orange						X		X			X			X
8. Lambert Road, Orange		X				X	X	X				X		X
9. Pomeroy Ave. & E. Main St., Meriden			X		X	X		X		X	X			X
10. Conn. Post Expansion, Milford						X		X		X	X	X		X
11. Milford Pkwy. & Wilbur Cross Pkwy., Milford	X				X	X		X			X			X
12. "Magic Mile" Expansion Hamden			X		X		X					X		X

**TABLE 2**  
**SUMMARY COMPARISON OF ALTERNATIVE SITES**

Site	Valley Service Road, North Haven	Bailey Road, North Haven	Terminal Road, North Haven	I-95, Exit 56, Branford	I-95, Exit 53, Branford	Evergreen Avenue, Hamden	Putnam and Morse Streets, Hamden	Marsh Hill Road, Orange	Lambert Road, Orange	Pomeroy Avenue & East Main Street, Meriden	Connecticut Post Expansion, Milford	Milford & Wilbur Cross Parkways, Milford	Magic Mile, Hamden
<b>Overriding Concerns:</b> <ul style="list-style-type: none"> <li>• Access</li> <li>• Land Use Compatibility</li> <li>• Legal or Political Constraints</li> </ul>	Access provided by I-91, Wilbur Cross Parkway, and an arterial network.	No access to highway except through circuitous local street network.	Same as Bailey Road.	Access to I-95 interchange and U.S. 1 available.	Only westerly access to I-95 is available.	Access provided via Dixwell Avenue, a heavily used and congested arterial.	Same access as Evergreen Avenue, with the addition of Putnam Street, a local street.	Access provided by I-95.	Same as Marsh Hill Road.	Access provided by I-91.	Access provided by I-95 and U.S. 1.	Although site is adjacent to parkways, no interchanges exist.	Primary access is via Dixwell Avenue, but location is near Wilbur Cross Parkway.
	No conflicts exist with surrounding land uses. Site is located in the town's industrial/commercial corridor.	Site is located in a heavy industry area incompatible with a regional retail facility.	Same as Bailey Road.	No conflicts with surrounding land uses.	A large portion of the site is currently in use, leaving inadequate land for a mall.	Located near residential areas.	Same as Evergreen Avenue.	No conflicts with surrounding land areas.	Located near residential areas.	No conflict with surrounding land uses.	No conflict with surrounding land uses.	No conflict with surrounding land uses.	No conflict with surrounding land uses.
	Development of the site is actively being pursued with town administration support.	Site is currently being developed as an industrial park.	Site is currently under contract for industrial park development.	Recent attempts to develop the site for use as a shopping center were rejected by the town.	Recently the site of a small shopping center, now defunct.	Local opposition prevented retail development at this site.	A bond issue to develop an industrial park here was rejected by the town council.	Another developer is currently attempting to develop this site. Sewer service problems are causing delays.	Residents of a nearby community have opposed development.	Infringement on riparian rights of adjacent landowners has precluded development.	Mall is currently being improved by owners. No applications for permits necessary for expansion have been submitted.	Developer has recently resubmitted application for a zoning change needed for development.	Owners have previously rejected proposals for expansion of facilities.
<b>Serious Constraints:</b> <ul style="list-style-type: none"> <li>• Land Use Constraints</li> <li>• Market Coverage</li> <li>• Site Size</li> <li>• Infrastructure</li> </ul>	Site was rezoned to allow for shopping center use.	Zoning change required.	Same as Bailey Road.	Only a small and inadequate portion of the site would allow shopping center use.	Site is partially developed and too small to accommodate a large shopping mall.	No zoning change required.	No zoning change required.	No zoning change required.	No zoning change required.	No zoning change required. Wetlands permit would be required.	No zoning change required.	Zoning change required. Currently zoned for low-density residential use.	No zoning change required.
	Covers entire targeted market area.	Site centrally located.	Same as Bailey Road.	Site would only cover eastern portion of the market area.	Same as I-95, Exit 56.	Site is centrally located, but would not cover the eastern edges of the market area. Also, has access and visibility problems.	Same as Evergreen Avenue.	Site would only cover western section of the market area.	Same as Marsh Hill Road.	Site would only cover northern section of the market area.	Site would only cover western section of the market area.	Same as Connecticut Post Expansion.	Although site is centrally located, it would not cover eastern edges of the market area.
	Development of 78 acres of the 117.5-acre site would be adequate for a regional mall development.	The 63-acre site is adequate for a regional mall development.	The 129-acre site is adequate for a mall development.	The 30-acre site could accommodate less than 500,000 square feet of retail space.	If the entire 55-acre site was developed, it could accommodate up to 700,000 square feet of retail space. However, much of the site is currently in use.	The 112-acre site is adequate for mall development.	The 44-acre site could accommodate a maximum of 600,000 square feet of retail space.	The 65-acre site is adequate for a regional shopping mall.	The 30-40-acre site could accommodate a maximum of 500,000 square feet of retail space.	The 100-acre site is adequate for mall development.	The combination of the existing mall and a 75-acre parcel for expansion could accommodate a regional shopping center.	The 100-acre site would be adequate for a regional shopping mall.	Development of this 65-acre site would require placement of structure in existing parking area and construction of a new parking facility.
	Water and sewer services would be available after construction of connectors and improvements to water system.	Water and sewer services are available.	Water service is available. Sewer service would require construction of a ½-mile trunk line.	No water or sewer service available. Sewer connection may be simple to achieve. Water connection could be more difficult.	Water and sewer services are available.	Water and sewer services are available.	Water and sewer services are available.	Unavailability of sewer service has, due to town ordinance, precluded development of the site.	Same as Marsh Hill Road.	Water and sewer services are available. Town's water distribution system requires extensive repair.	Town's sewer treatment facility operating at capacity. Plans for expansion awaiting federal funding.	Same as Connecticut Post Expansion.	Water and sewer services are available.
<b>Other Constraints:</b> <ul style="list-style-type: none"> <li>• Flooding</li> <li>• Water Quality (Wetlands)</li> <li>• Air and Noise Quality</li> <li>• Historic and Archaeological</li> <li>• Local Road Status</li> </ul>	No measurable impact on flooding in the Quinnipiac River is expected. Storm-water discharge to the river would be reduced.	Overbrook traverses the site. Filling could impact upon upstream areas.	Portions of the site may encroach upon conveyance way.	No apparent problem.	No apparent problem.	Run-off problems may develop once raw land is paved.	No apparent problem.	No apparent problem.	No apparent problem.	Wetland status may imply potential flooding problems.	Proximity to Indian River would warrant investigation of potential flooding problems.	No apparent problem.	No apparent problem.
	No contravention of water quality standards is anticipated. Approximately 25 acres of wetland would be developed.	Location of site in coastal zone management area and in the tidal wetlands could signal potential water quality problems.	Same as Bailey Road.	No apparent problem.	No apparent problem.	Run-off and wetland areas may be potential problems.	No apparent problem.	Some concern exists about impacts on the Oyster River if the site is developed.	No apparent problem.	Since site contains wetlands, water quality problems may be encountered.	Proximity to Indian River would warrant investigation of potential water quality problems.	Since the original site plan called for a sediment retention basin, some water quality problems may result from site development.	No apparent problem.
	No significant impact anticipated.	Air and noise quality would depend upon the local street access provided.	Access confined to local residential streets could cause air and noise problems.	No apparent problem.	Access via local residential streets could cause air and noise problems.	Access via local residential street could cause air and noise problems.	Use of local residential streets for mall access could cause air and noise problems.	No apparent problem.	Use of local streets for mall access could cause air and noise problems.	No apparent problem.	Increased traffic on heavily congested arterial road may cause air and noise problems.	No apparent problem.	Increased traffic on a heavily congested road would worsen serious air quality problems.
	There are three areas with potentially significant archaeological sites.	No apparent problem.	No apparent problem.	No apparent problem.	No apparent problem.	No apparent problem.	No apparent problem.	No apparent problem.	No apparent problem.	No apparent problem.	No apparent problem.	No apparent problem.	No apparent problem.
	Several modifications are proposed to accommodate mall traffic.	Road improvements are needed in light of insufficient access to the highway.	Local roads would require extensive widening and improvements.	Some improvements may be needed along local road connector and U.S. 1.	Some improvements may be necessary since site access would be via local streets.	Some improvements are needed since existing arterial — Dixwell Avenue — is heavily congested.	Condition is the same as for Evergreen Avenue. Putnam and Morse Streets would require upgrading.	Marsh Hill Road, a two-lane local street, would need to be widened.	Lambert and Indian River Roads would need to be widened.	Pomeroy and East Main Street would need to be upgraded and widened.	U.S. 1 would need to be improved. Road is currently congested.	Except for Oronoque Road, which would have to be expanded to handle trucks, there is no local street access to the site.	Major improvements would be needed since existing arterial, Dixwell Avenue, is heavily congested.

As an initial stage of the screening analysis, each of the candidate sites was evaluated in terms of the three critical screening criteria which would clearly preclude development of a major retail center. Of the twelve sites considered, seven are infeasible for development due to one or more overriding problems of either insufficient transportation access, incompatibility with adjacent land uses, or legal or political constraints. These are:

- (1) Bailey Road, North Haven
- (2) Terminal Road, North Haven
- (4) I-95, Exit 53, Branford
- (5) Evergreen Avenue, Hamden
- (6) Putnam and Morse Streets, Hamden
- (8) Lambert Road, Orange
- (9) Pomeroy Avenue and East Main Street, Meriden

The Bailey Road, Terminal Road, Exit 53 of I-95, Evergreen Avenue, and Putnam and Morse Streets sites all have insufficient access characteristics, unmitigable incompatibility with adjacent land uses, either residential or industrial, and suffer from legal or political constraints (status). The Bailey Road site is presently being developed as an industrial park, and the Terminal Road Site is under contract for industrial development. The I-95, Exit 53 site in Branford has previously been developed and thus is no longer available as a potential site for a shopping center. Previous efforts to develop a shopping center at the Evergreen Avenue site in Hamden were prevented by local opposition. A bonding issue necessary for development of an industrial park on the Putnam and Morse Streets site in Hamden was rejected by the Town.



The Lambert Road site is located adjacent to industrial land and has access characteristics inferior to those of another candidate site directly across the road (the Marsh Hill Road site); it therefore was eliminated from further consideration.

Finally, the Pomeroy Avenue site in Meriden is not a feasible alternative as development would impede a water course in violation of the riparian rights of one or more contiguous property owners. A recent proposal for a shopping mall on this site was abandoned because of this overriding problem.

#### Second Stage Screening of Single-Site Alternatives

Following the initial screening of alternatives for overriding criteria, a second stage of analysis was conducted in order to evaluate the remaining candidate sites in further detail. At this stage, information pertaining to the full complement of twelve screening criteria defined above was considered for each alternative. Five candidate sites were examined for the second stage screening analysis, including:

- (3) I-95 (Exit 56), Branford\*
- (4) Marsh Hill Road, Orange
- (10) Connecticut Post, Milford
- (11) Milford Parkway and Wilbur Cross Parkway, Milford\*
- (12) "Magic Mile," Hamden\*

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\* Although each of these sites is characterized by an "overriding" problem they were not initially eliminated from the screening analysis because the severity of the problem did not necessarily preclude development.

Results of the second stage screening analysis indicate that none of the five remaining candidate sites have both the necessary central location and adequate acreage to provide comparable retail service to the market area of the proposed North Haven Mall facility. Further, additional severe constraints associated with the Branford and Hamden Magic Mile sites make each of these locations entirely impractical for the development of major retail centers in the foreseeable future.

The Branford site (3), situated near Exit 56 of I-95, is located well to the east of the City of New Haven. This is the least populous sector of the market area and thus the least desirable location for development of a major regional retail center. The Branford Planning and Zoning Commission has limited the amount of land available for retail development at this site to 30 acres in response to a rezoning application associated with a previous shopping center proposal. This amount of land is not sufficient for development of any major retail facility and there is currently no active interest in major retail development at this site, indicating its low desirability as a potential location.

Although the concentration of retail facilities at Magic Mile along Dixwell Avenue in Hamden (12) is centrally located and might provide adequate market coverage, physical site constraints pose serious problems for the expansion of these facilities. Since the Dixwell Avenue retail corridor is already densely developed, the only possibilities for substantial expansion in this area involve the use of the existing parking lots for additional structures concurrent with construction of multi-level parking garage facilities and major reconstruction of the existing shopping centers. Suggestions for such a

project, originally discussed by Town officials late in 1979, were never formally proposed. Informal concepts for such a project, according to Town sources, were rejected by the owners of the Magic Mile shopping centers. In addition, expansion of retail facilities along Dixwell Avenue would exacerbate already serious traffic and air quality problems in that area.

Further, the retail facilities at Magic Mile are primarily discount in nature, and any substantial additions to these facilities would be likely to have similar retail characteristics. Such types of retailing would not be comparable to the retail services that would be offered at the proposed North Haven Mall.

The three remaining candidate sites are Marsh Hill Road in Orange (7), expansion of the Connecticut Post Center in Milford (10) and the site situated near the intersection of the Milford Parkway and the Wilbur Cross Parkway in Milford (11). These sites are all located close to one another at the southwest edge of the market area for the proposed North Haven Mall (see Figure 1.)

Retail facilities at all three locations are separated by more than 30 minutes driving time from the northern and eastern sectors of the North Haven Mall market area and therefore would not provide adequate service to it. Specifically, the towns of Cheshire, Wallingford, Durham, Meriden, Middlefield, North Branford, Guilford, and Madison would not be well served by any retail center in the western segments. Since these eight towns represent a substantial portion of the total market area, none of these sites could provide adequate retail service to the North Haven Mall market area.

In conclusion, the results of the screening analysis indicated that no practicable and reasonably foreseeable alternative site to the proposed North Haven Mall site is available for provision of comparable retail services at a single location. Twelve possible sites were identified and evaluated as alternative locations for major regional retail centers. Seven of the twelve sites are infeasible based on initial screening criteria of inadequate transportation access, land use compatibility problems or legal or political (status) constraints. A more detailed second stage screening analysis indicated that none of the remaining five alternative sites is appropriate in terms of both size and market coverage for development of a retail center providing comparable services in the North Haven Mall market area.

#### New Haven CBD Alternatives

The potential of the New Haven Central Business District (CBD) as an alternative for expanded retail services was analyzed separately. This evaluation focused on:

- o Downtown New Haven as a single-site alternative for comparable retail services to those proposed for the North Haven Mall; and
- o Downtown New Haven as an alternative means for providing a portion of the retail services contemplated at the North Haven Mall.

It is important to note that any addition of major shoppers goods retailing that might be contemplated for the City of New Haven must be concentrated in the downtown area. This reflects basic retailing locational strategies which seek to maintain and nurture a critical mass of comparable activities that can gain mutually by proximity to one another. Such strategies are

accepted retailing principles generally adhered to by the major chain department stores. The need to insure a critical mass of retail concentration necessitates that any department store that might be attracted to the central business district must avoid becoming a single, free-standing element.

The principal focus of this examination of the city to serve as an alternative to the proposed North Haven Mall, therefore, centered on the downtown area. No other section of the city offers the possibility for creation of a sufficient concentration of retail activity to attract a major addition of shoppers goods facilities.

On the basis of extensive analysis of downtown's trade area, the pattern of retailing within metropolitan New Haven, past trends for shoppers good volumes, and the sales outlook for general merchandise, apparel and furniture throughout the 1980s (see Appendix L: Economics and Land Use), it was concluded that downtown New Haven cannot serve as a single-site alternative to the proposed North Haven Mall. Within the reasonably foreseeable future, it was also concluded that the New Haven central business district cannot function as an alternative means to the North Haven Mall by the addition of a substantial amount of shoppers goods space.

This conclusion was supported by the recognition that substantial and effective steps would have to be taken within in the early 1980s to assure that any substantial additions to downtown New Haven's retail base would be in place before the end of the decade. For reasons noted below, that eventuality will not likely occur and, as a result, downtown cannot be considered a reasonable alternative to the proposed North Haven Mall within the foreseeable time

horizon, by the opening of the proposed North Haven Mall in late 1983 or even by the end of the 1980s.

More specifically, the conclusions in this regard were supported by the following facts:

- o No specific and announced plans have been advanced for a center comparable in size to that proposed for the North Haven Mall;
- o No specific and announced plans have been advanced with reference to any major shoppers goods addition in downtown; and
- o No specific and announced plans have been formulated at a generalized level to cover either of these two retail types of development nor are there any specific permits or other administrative applications pending reflecting "pre-development" steps that would suggest near or even longer term commitments of this type.

The basic conclusion that downtown New Haven cannot serve as an alternative site for comparable service facilities to those proposed in the North Haven Mall was further supported in at least four other respects, each of which would preclude downtown from consideration as a practicable alternative:

- o Department store corporate location strategies;
- o Downtown retailing outlook;
- o Site constraints and limitations; and
- o Funding exigencies.

Department Store Corporate Locational Strategies. Department store locational strategies are relevant to ascertain the prospects for shoppers goods additions in downtown. The major retailing organizations committed to the North Haven Mall (as reflected in Appendix L: Economics and Land Use) view the New Haven SMSA as a "two-store configuration," with branches in the northern and western sectors (the latter would include a site either in the western part of the SMSA or one immediately proximate to Milford or environs). The unavailability of the North Haven Mall would place a higher priority on a

possible location to the southwest (e.g. Milford or Orange), reflecting these established strategies with respect to market coverage. Even in these circumstances, however, as reflected in the following analysis, downtown would not be within the purview of the locational strategies of these organizations.

Two major implications can be drawn from this possible scenario:

- o First, without the North Haven Mall, the level of public service previously anticipated by that facility would be substantially altered and reduced. Forecast levels of improved sales in-flow to the metropolitan area and reduced sales out-flow would be radically changed and area residents would likely be required to go to more distant locations to meet their major shopping needs. Accordingly, the need for additional shoppers goods facilities in the New Haven metropolitan area would remain unsatisfied.
- o Second, each of the stores affected by a change in the Mall's status would undertake a search for alternative sites as a defense to maintain or acquire market share. Although the success of that search is not predictable, major department store chains presently operating in the North Haven Mall market area provide less than adequate service to the consuming public. Sears Roebuck is currently in an out-moded facility in the northern suburban sector. Several years ago J.C. Penney's moved into a small, provisional outlet (less than 40,000 square feet) at a similar suburban location, in line with earlier corporate plans to open a contemporary facility at the Mall to better serve area consumers. Macy's does not have any suburban outlets in the market area and G. Fox is seeking to establish itself in metropolitan New Haven for the first time. Thus, the continuation of current operations would be less desirable than those proposed for the North Haven Mall, both from the viewpoint of the respective anchor stores and the consuming public.

Downtown New Haven would not figure into these considerations for alternative sites. As established in the course of this study, the department stores within this group specifically see suburban locations as part of their corporate strategies and exclude downtown sites from further consideration. The choices that would follow, if the North Haven Mall were not available, were examined in light of each individual store either committed to the Mall or active in the market area. From the standpoint of downtown New Haven and other choices, this examination highlighted the following:

Department Store

Status

Macy's	Already represented downtown; broader suburban market coverage needed.
Sears	Presently in the New Haven market at two locations. Though committed to greater market coverage through the North Haven Mall, this store would likely "hold the line" absent any other choices in the north.
G. Fox	Seeks a two-store strategy which would include access to metropolitan northern suburbs and one other western anchor site. (That site could be within the metropolitan area or alternatively in Milford at, for example, Connecticut Post.) Representatives of this store have indicated that downtown areas -- including New Haven -- are not considered as part of overall corporate locational strategies and policies.
Penney's	Again committed to a two-store locational strategy for the New Haven metropolitan area. Absent a choice in North Haven, they may have to give up that strategy and only pursue a "western anchor."
Malley's	Already present downtown.

In line with this review of corporate strategies, coupled with specific situations in which each of these stores currently find themselves, it is not reasonable for downtown New Haven to be considered as an alternate location for retail service facilities comparable to those planned for the North Haven Mall.

Downtown Retailing Prospects. The viability of downtown to serve as an alternative for comparable retail facilities to those proposed as part of North Haven Mall demonstrates the lack of real incentives to major department stores confronting locational decisions. A number of basic indicators were pertinent in this respect (see Appendix L: Economics and Land Use), including:

- o Sharp declines in Central Business District (CBD) shoppers goods sales in recent years, down (in constant 1977 dollars) from \$99.4 million in 1972 to \$83.9 million in 1977;



- o A long standing trend, reflecting such declines as other competitive locations, have become more firmly established in suburban fringe locations;
- o Continuing difficulties in bolstering downtown specialty retailing, most recently in the so-called "entertainment district" where plans for modest expansion -- on the order of 90,000 square feet of space -- have been deferred indefinitely despite a protracted pre-planning phase;
- o The changing complexion and composition of the Chapel Street Mall which has become increasingly tenanted by fast food operations and other merchants with limited appeal in the key categories of shoppers goods critical to gaining comparison shoppers and anchoring a major shopping district;
- o A constricted market area which has become increasingly focused on the City of New Haven where population declines have continued in the 1970s, extending long term trends originating in the post-World War II era;
- o Changes within that population base that encompass substantial concentrations of low and moderate income households with smaller purchasing power, in the aggregate, compared with suburban fringe communities; and
- o A modest captive daytime population in the form of office and other employees that has not measurably changed during the 1970s. This reflects, in large measure, the city's inability to mobilize and capitalize on downtown's "central location" and capability to serve a larger administrative role within the metropolitan New Haven area. This inability in strengthening the very function which many other downtowns have succeeded with in the recent past, notwithstanding changing retailing patterns, underscores the weakness of various assertions for further reinforcing New Haven's retail base.

As a result of all of these factors, the necessary incentives for influencing department store locational choices are absent in the case of downtown New Haven. Accordingly, there is no prospect in the reasonably foreseeable future for department stores to dramatically change their locational strategies and seek branch locations within the central business district that would, in turn, allow this area to serve as an alternative for retail facilities comparable to those programmed for the North Haven Mall.

Site Constraints and Limitations. The site constraints and limitations of the City's downtown area also serve to preclude the prospect of any additional shoppers goods retailing in New Haven. Even if the downtown were considered in relation to alternative means rather than a comparable alternative, a sizable land area would be required to accommodate the "footprint" of any sizable major retailing additions. If the addition were to consist, for example, of only one department store and complementary specialty shops, an area encompassing at least six acres would be necessary. Illustratively, based on typical retail design requirements, this six acre parcel would include:

- o A two-acre "footprint" for a multiple level shopping center of which two levels might be devoted to 50,000 square feet each of specialty shops (for a total of 100,000 square feet) and three levels of about 35,000 square feet each (totalling about 100,000 square feet) for a department store representation; and
- o A corresponding multi-level parking garage requiring, in line with this illustration, two acres with the provision of 1,000 spaces (totalling 350,000 square feet) in a five story facility.

The downtown site constraints in this instance place the possibilities for obtaining a six acre tract of this type well beyond the reasonable foreseeable future, because of:

- o Fragmented ownerships consisting of small downtown sites (many in the 5,000 to 10,000 square foot range);
- o Problems of assembly in aggregating an extensive site of this size within downtown;
- o Specific problems that would arise in obtaining a land resource immediately adjacent to or across from the Chapel Street Mall as a logical expansion of the retail concentration located there;
- o The likely recourse and need for a public authority to intervene and serve as the initiator of this assembly process, given recalcitrant property owners who would be affected by such a taking;
- o Further exacerbation and attenuation of the process through likely litigation on the part of such property owners; and

- o Relocation problems arising with respect to existing viable improvements and tenants within structures that might be affected by such actions.

Funding Exigencies. It is also likely that extreme financial pressures would be encountered by any downtown assembly along the lines described herein.

Major obstacles in this respect would encompass:

- o Acquisition of downtown's most expensive land by virtue of the "central location" upon which such a retailing addition would be placed;
- o A direct and substantial role for the City of New Haven as the initiator of a long term development process;
- o Identification and assurance that public sector funding was available to obviate inherent infeasibility absent such public sector involvement;
- o Recourse to other, non-city public financial resources given the severe pressures characterizing New Haven's provision of basic municipal services and capital improvement funding;
- o Limited federal programs under which such a venture might qualify;
- o The explicit and essential commitment of major department store chains necessary to obtain urban development action grant funding, the most likely (or possibly exclusive) federal monies that might be available to provide such assistance;
- o An intricate and complex coordination between public and private sector interests that would carry that process well beyond the reasonably foreseeable future.

These funding exigencies, added to the previously noted factors related to department store corporate strategies, downtown retailing prospects, and site constraints and limitations, represent singly and in combination, forces that eliminate the central business district as an alternative site for comparable retail services facilities to those proposed in the North Haven Mall.

## ALTERNATIVE MEANS FOR PROVISION OF COMPARABLE RETAIL SERVICES

The next category of alternatives which were examined were combinations of sites for retail development which might be hypothesized as alternative means for servicing the market area. This analysis revealed that no possible combination of candidate sites, determined to be practical alternatives in the reasonably foreseeable future, could provide the necessary market coverage to represent a comparable alternative to the proposed North Haven Mall.

The analysis conducted to assess combinations of candidate sites as practicable alternative means for provision of comparable retail services employed a somewhat modified set of evaluation criteria. To review briefly, the basic categories of evaluation criteria discussed under the analysis of single-site alternatives are listed below:

- o Overriding Problems
  - Access sufficiency
  - Compatibility with adjacent land uses
  - Legal and political constraints
- o Serious Constraints
  - Site land use constraints
  - Market coverage and site location
  - Site size
  - Infrastructure
- o Other Constraints
  - Flooding
  - Water quality (wetlands)
  - Air and noise quality
  - Historic and archaeological resources
  - Local traffic

For the analysis of multiple sites, the factors determining adequacy of market coverage and site location, as well as site size, were different from those considered for single-site alternatives. In the case of market coverage, the distribution of available sites that could represent possible multiple-site combinations was examined rather than the potential market coverage associated with each candidate site individually. For example, two retail centers located in the eastern and western segments of the market area might possibly provide services to a trade area comparable to that offered by the central location of the North Haven Mall.

Similarly, with respect to site size, two or more smaller facilities, at the proper locations, might provide an alternative in terms of retail service to the market area. However, each retail center associated with such a multiple-site alternative would still have to attain a gross leaseable area of approximately 500,000 to 600,000 square feet in order to support a two-anchor facility and market a range of shoppers goods that might be comparable to the types and quality of merchandise that would be available at the North Haven Mall. A minimum site size of approximately 40 acres (outside of the New Haven CBD) is necessary to accommodate a regional shopping center or addition of this size that can be both cost effective and embody the appropriate design features for a competitive shopping mall.

Results of the screening analysis for all candidate sites and assessment of the potential for retail development in the New Haven CBD indicated that there are only three viable sites in or around the North Haven market area for the addition of major new retail facilities within the reasonably foreseeable future. These are:

- (7) Marsh Hill Road, Orange
- (10) Connecticut Post Expansion, Milford
- (11) Milford Parkway and Wilbur Cross Parkway, Milford

As discussed previously, all three of these sites are located at the extreme southwest edge of the market area. Therefore, none of these locations, either as a single-site alternative or in combination, would offer convenient access to retail services for the people of the towns in the northern and eastern areas of the North Haven Mall market area. Included in these areas are the residents of Cheshire, Meriden, Middlefield, Wallingford, Durham, North Branford, Guilford, and Madison, who would have to travel long distances in order to visit shopping facilities located in Orange or Milford.

Hypothetical combinations of these three sites with other major new centers or expanded facilities in either Branford, Hamden or New Haven might possibly provide adequate market coverage to the trade area. However, each of this latter group of three locations is not practicable as a feasible shopping center location in the reasonably foreseeable future, for reasons discussed as part of the evaluation of single-site alternatives.

In the case of Branford, the only site identified as possibly viable for retail development is located near Exit 56 of I-95. Overriding problems concerning legal and political constraints limit the amount of developable land on this site and preclude development of a regional shopping center at this location. Specifically, the Branford Planning and Zoning Commission, in a decision associated with a previous shopping center proposal, limited the amount of land available for a retail development at this site to 30 acres. A site of this size would not allow adequate space for the necessary structures

and parking facilities to support a major regional shopping center, even allowing for a multiple site alternative incorporating two or more medium sized facilities. Apparently due to this factor, development interest in this site has ceased, indicating its low desirability as a potential location.

The only possibility for additional major retail facilities identified in Hamden involves expansion of existing shopping centers located in the Magic Mile area along Dixwell Avenue. As discussed previously, expansion of these existing centers would require the use of space presently devoted to parking lots for additional retail outlet structures and construction of multi-level parking facilities. This would involve complete reconstruction of the shopping malls presently in operation at this location. Suggestions for such a project, originally discussed by Town officials late in 1979, were never formally proposed. The owners of these existing centers, according to Town officials, rejected such a project. Therefore, any multi-site alternative including expansion of the Magic Mile facilities in Hamden would be infeasible and remote due to overriding legal and political constraints. Furthermore, any additional activity along this segment of Dixwell Avenue would exacerbate already serious traffic and air quality problems in the area.

A variety of factors, discussed in the previous section, have indicated that no major additions of retail space in the New Haven CBD are practicable in the foreseeable future. To reiterate briefly, no plans have been announced or developed, as of the present time, for any major addition of shopping goods facilities in the New Haven CBD. In light of the necessary lead time for planning, permit approval and construction for development of such a project,

it is not feasible for any major new retail facility in the CBD to be operational before the early 1990's.

As a second critical factor, a review of the corporate branching strategies of each major retail chain organization involved in the New Haven market indicates that no new full line anchor department store is likely to be located in the CBD. Such location decisions on the part of the major chain stores are reinforced by the long-term trends in retail activity in the New Haven CBD which indicate sharp declines in downtown shoppers goods sales and a shrinking market base. These retail market trends provide a lack of incentives to major retail organizations to make large long-term capital investments in CBD facilities.

The difficulty of assembling a suitable parcel of land for a major retail project represents an additional impediment to expansion of retail activity in downtown New Haven. Site constraints and limitations on the project represent formidable obstacles to assembling a site in the CBD which could be both sufficiently large for a suitably designed facility and contiguous to the existing downtown retail center in order to create an adequate concentration of activity to support regional level retail functions.

Finally, difficult problems exist for the financing of any major addition to retail space in the New Haven CBD due to the high cost of land and the necessity of public sector participation in any viable project of adequate size. As the result of all these factors, the New Haven CBD was eliminated as a practicable alternative for provision of retail services comparable to those proposed at the North Haven Mall.



In addition to alternative sites for new shopping centers and possible expansion of existing shopping malls in the market area, several other concepts were suggested during the scoping process as alternatives to the North Haven Mall. Such concepts include alternative retail service provided by additional small retail centers or at freestanding sites for major department stores dispersed throughout the market area.

Neither of these concepts represents a practicable or comparable alternative for provision of retail services similar to those proposed for the North Haven Mall. Small retail centers, in particular, do not offer retail services which are similar to those found at larger regional shopping malls. Retail outlets typically located at neighborhood and community level centers include small stores specializing in convenience goods, supermarkets and discount chain outlets. Thus, the range of merchandise offered at a smaller center is not comparable, either in terms of quality or types of products, to the services provided by a major regional shopping mall. Since similar retail centers attract fewer shoppers and service smaller market areas, it is not possible to offer a similar range of shoppers goods (such as clothing, furniture, and household appliances) as that provided by a regional shopping center.

The concept of locating major department stores at single freestanding locations is not a practicable alternative. The viability of any major retail outlet offering a broad range of shoppers goods requires a critical mass of comparable activity to generate a sufficient market attraction and level of sales. Such a critical mass can only be achieved at a location with a concentration of retail activity. The location strategies of the major department

store organizations involved in the New Haven region, discussed previously in this appendix, illustrate this basic principal of retail economics.

It was, therefore, concluded that no possible combination of practicable and feasible site alternatives is available in the reasonable foreseeable future which could offer a substitute for the proposed North Haven Mall in satisfying the public need for retail services in the New Haven metropolitan area.

#### ON-SITE ALTERNATIVES FOR THE PROPOSED NORTH HAVEN MALL

A variety of hypothetical options for alternative configurations of the proposed Shopping Center facilities were examined as part of the alternatives evaluation. These included: project design options such as alternative facility layouts, construction of decked parking facilities and provision of multi-level mall structures as well as the possibility for a reduced scale of retail activities at the proposed North Haven Mall. The following sections discuss the aspects and implications of each of these options, including the effectiveness of each alternative in reducing land requirements and consequent environmental impacts, as well as the viability of Mall operations in each case. Table 3 sets forth a summary comparison of the potential alternatives.

##### Alternative Layout Configurations

There is no reasonable potential for preserving vegetative areas on the site through a change in the size of the "footprint" of the buildings or of the associated ground level parking facilities because of the location of the Quinnipiac River encroachment line and site constraints imposed by the Town of

North Haven Inland Wetlands Commission in the granting of an Inland Wetland Permit. There is no available land which would allow sufficient flexibility for alterations or modifications of design which would yield any benefits by way of perservation in vegetative areas.

The approximately fifty acres required for the on-site parking area for 5660 vehicles is principally due to the requirement of the Town of North Haven zoning ordinance. The Town of North Haven zoning ordinance requires a minimum of 5 parking spaces per 1000 square feet of gross leasable area, which conforms with industry standards for facilities such as the proposed Mall. Consequently, seeking a variance from this zoning requirement would not be feasible, as it would result in insufficient parking for the proposed facility. The potential or reducing the on-site parking areas and preserving vegetative areas is discussed in the following section.

#### Decked Parking Facilities

Although it is theoretically possible to preserve some portion of the existing vegetative resources on the project site through implementation of decked parking facilities, this alternative is not practicable for a number of reasons. In general, as discussed below, the cost of decked parking per space is many times that for ground level facilities and the mitigation of impacts achieved by decked parking would be minimal.

TABLE 3

## SUMMARY COMPARISON OF ON-SITE ALTERNATIVE CONFIGURATIONS

Alternative	Proposed Configuration	Decked Parking (25%)	Multi-Level Mall Structures	Reduced Scale (3 Anchor Mall)
Total developed acres	78	68*	74*	66*
Acres of mall footprint	15	15	11	11
Acres of parking	40	30	40	32
Acres of wetlands eliminated	25	23**	25	20
Impacts on wetlands preserved	—	The requirements of the on-site road network would cause the physical isolation of 2 acres of wetlands that could be preserved. This isolation would severely limit the value of the wetlands for wildlife habitat, vegetative diversity, and water storage and purification.	—	The requirements of the on site road network would cause the physical isolation of the 5 acres of wetlands that could be preserved. This isolation would severely limit the value of the wetlands for wildlife habitat, vegetative diversity, and water storage and purification.
Impacts on flooding	No measurable impact on flooding in the Quinnipiac River is expected. Storm-water discharge to the river would be reduced for large storms.	The 2 acres of wetlands preserved constitute only 3% of available site storage for the 100-year flood. Since no flooding impacts would occur with the proposed layout, this savings would not affect flooding.	Same as proposed configuration.	The 5 acres of wetlands preserved constitute only 7% of available site storage for the 100-year flood. Since no flooding impacts would occur with the proposed layout, this savings would not affect flooding.
Impacts on traffic	The Mall would generate 42,000 weekday trips daily and 56,000 trips on Saturday. All roads would maintain acceptable levels of service.	Same as proposed configuration.	Same as proposed configuration.	The reduced scale Mall would generate 33,000 weekday trips daily and 44,000 trips on Saturday. All roads would maintain acceptable levels of service.
Impacts on air and noise quality	No significant impact.	Same as proposed configuration.	Same as proposed configuration.	Air and noise impacts would be less than with the proposed configuration.
Would regional retail need be satisfied?	Yes	Decked parking would significantly increase the applicant's site development costs, which in turn would likely affect project feasibility. Patron distaste for decked parking would reduce shopper use of those mall stores dependent upon decked parking.	This configuration would substantially increase construction costs and create a physical layout which would be undesirable to mall patrons.	This configuration would reduce the Mall's ability to improve the region's retail sales "capture" rate. Suburban fringes of the metropolitan area would remain unsatisfied from a retail standpoint. There would be a reduction in potential employment and income benefits. The reduced size would affect the economic viability of the Mall.

\* The total developed acres are dependent upon actual detailed design. The numbers presented are considered reasonable estimates of area requirements in accordance with design standards and site constraints.

\*\* 21 acres if 50% of the parking was decked.

Economic Impracticability. An in-depth evaluation of the economic viability of using decked parking facilities at the North Haven Mall was conducted. The following summary of the economic implications of decked parking facilities illustrates the impracticability of this option.

The initial cost for development of structured parking necessitates an investment which is a multiple of that for "at-grade" solutions. Multiple level decks typically involve construction costs of \$4,000 to \$8,000 per space and those costs are applicable to the proposed Mall. The cost per space for paved surface parking at the Mall site is approximately \$1,400 per space, taking into account grading, fill, and drainage costs. Where decked parking facilities are utilized at new suburban shopping malls, they frequently accommodate between 15 and 25 percent of the total vehicular parking.

The incremental cost of providing decked parking to accommodate approximately 25 percent of the 5,600 required parking spaces at the proposed Mall would be approximately \$6.2 million (conservatively assuming the cost of decked parking to be \$5,800 per space, such facilities would cost \$8.12 million; the savings of approximately \$1,400 per space for 1,400 spaces must be subtracted from that figure to obtain the incremental figure). Since the \$1,400 per space cost for surface parking takes into account grading, filling and drainage costs, there are no other appreciable savings that would result from the utilization of decked parking. Decked parking would not allow any reduction in the purchase price of the land, as that amount is set by contracts between the applicant and optionees.

The \$6.2 million increment would represent an increase of more than 50 percent over the site development costs (e.g., filling, grading, preparation of pads, utilities), currently estimated at approximately \$12 million, and a 18-21 percent increase in the developer's construction costs for the proposed Mall, currently projected to range between \$30-\$35 million. (These figures exclude soft costs, such as design costs.) If decked parking were utilized to accommodate 50 percent of the required vehicular parking, the incremental cost would be approximately \$12.3 million, a 100 percent increase over site development costs and a 30 to 40 percent increase over the developer's construction costs. (These figures also exclude soft costs.)

It should be noted that decked parking structures within New England have consistently altered development feasibility to the point where those projects with such parking facilities have required direct public subsidies or have been "mature" malls. Public subsidies have generally taken the form of substantially discounted land costs to reflect the financial burdens of parking garages, or public sector development of such facilities. Two examples within Connecticut, by way of illustration, include the parking garage in downtown New Haven and a comparable facility in the Stamford central business district.

Decked parking is generally associated with a suburban shopping mall only where the facility has reached sufficient maturity that its clientele is established and it has achieved its expected level of productivity. When such a facility seeks to add new shopping services, in the form of a new anchor store and/or of mall shops, the value associated with additional property needed for surface parking areas has increased substantially since the time of the initial capital investment. The construction cost for decked parking is

thus less than the cost of land acquisition and construction of surface parking. Consequently, decked parking for an established and successful mall may be economically feasible; that is generally not the case for a new suburban mall.

Retail Disadvantage. In addition to the economic impracticability of decked parking, generalized observations in the retail industry reflect patron dislike for such structures. This distaste is reflected by the propensity for customers to utilize surface parking rather than decked parking structures, even when the latter are more proximate to the ultimate shopping destination. This phenomenon makes decked parking less desirable from the retail standpoint, since the second (and higher) levels of a decked parking facility are the last to be utilized by patrons. Thus, the anchor stores and mall shops closest to and dependent upon the parking facility suffer the potential disadvantage of reduced shoppers traffic. In addition, a decked parking structure on the eastern portion of the site would partially block the view by passengers in incoming vehicles of G. Fox or Macy's from the entrances to the site, a retailing disadvantage.

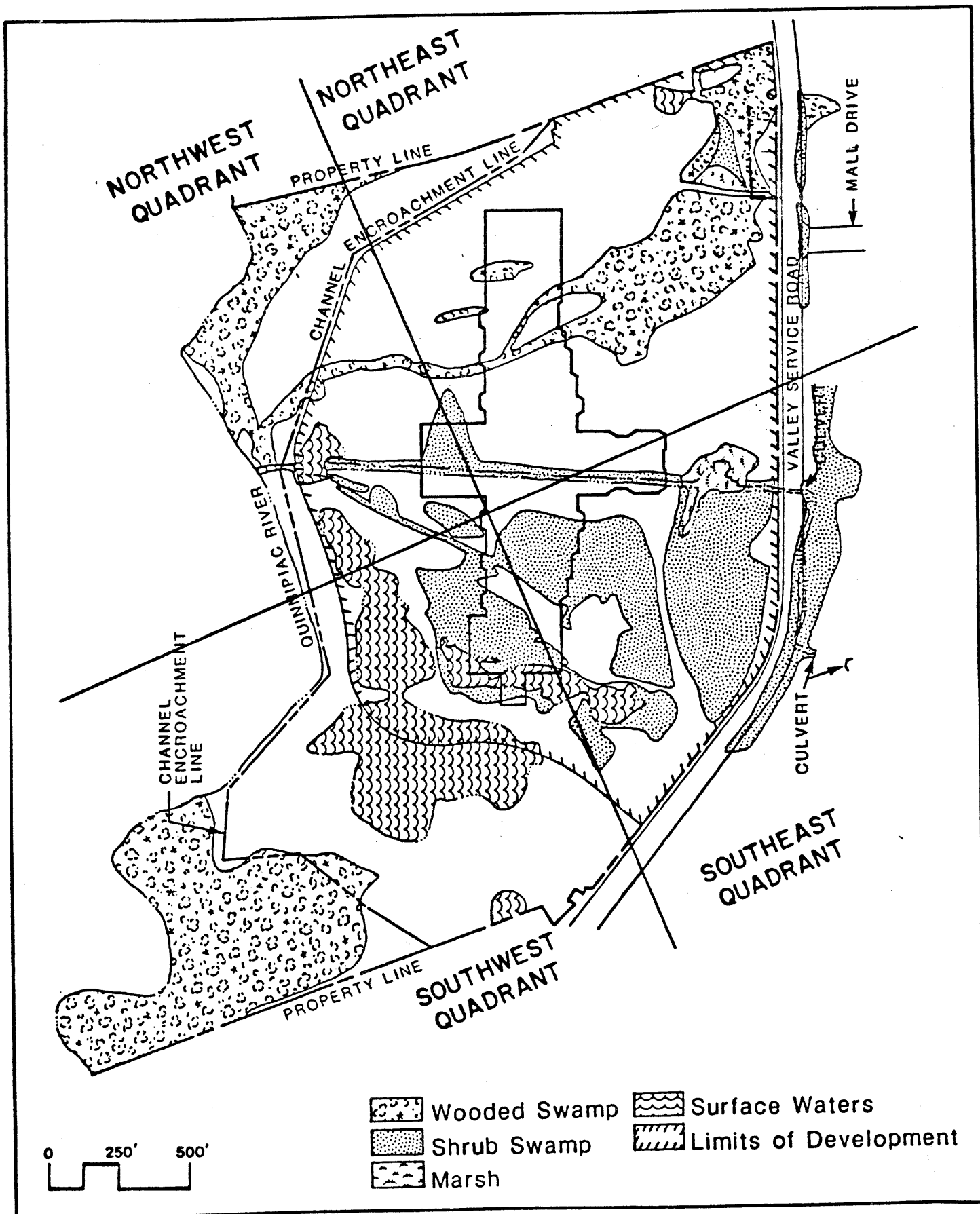
The internal circulation system of the proposed Mall has been designed to provide comparable customer access to different levels of the proposed Mall in order to achieve efficient vehicular traffic patterns, enhance appropriate pedestrian flows and maximize customer safety. Decked parking would reduce the optimal and desirable configurations which allow the proposed Mall to achieve these goals, and would thus be likely to deter shoppers from making repeated retail excursions to the facility.

Site Configuration Constraints. As described below, the benefits to vegetation (particularly wetlands) and wildlife that could be achieved through decked parking would be marginal. The on-site road network necessary to allow effective and safe on-site ingress and egress would generally result in the isolation of any areas that could be preserved. The isolation from surface water flows and other habitat would reduce the value and the viability of these areas in terms of vegetation and wildlife.

The limited wetlands mitigation potential of providing decked parking for 25% of the proposed Mall's parking requirements is due principally to the location of wetlands and the site configuration. The only impacted wetlands in excess of 5 acres outside the flood encroachment area and not situated within a building footprint are those located in the northeast and southeast quadrants of the site (opposite the proposed Mall Drive and south of the DOT ditch, respectively; see Figure 2). Even if the use of one of these areas could be reduced by the placement of decked parking on the western portion of the site (where there are only scattered and extremely small wetlands outside the encroachment area and footprint), the wetlands in the southeast or northeast quadrants would be isolated among Valley Service Road, ingress and egress roads, the outer ring-road, the free-standing building and storefront access roads.

Moreover, if decked parking could be utilized, it should be located in two diagonally opposite quadrants (e.g., the southwest and northeast quadrants) in order to provide comparability of shoppers' access to each of the four anchor stores. Placing all the decked parking in a single quadrant could not meet this necessary retailing criterion, and would therefore be





NORTH HAVEN MALL  
 VALLEY SERVICE ROAD  
 NORTH HAVEN, CONNECTICUT

# Wetlands-Site Plan Overlay



FIGURE 2

unreasonable. Placing decked parking in adjacent quadrants would also be undesirable, as it would lessen comparability of shoppers access to different parts of the Mall. In addition, there would have to be some parking provided in the non-decked quadrants, in order to support entrances to the stores and to minimize the potential for diminished consumer traffic for retailers near those entrances.

Applying these conservative retailing standards to the northeast quadrant, and retaining the basic design and elements of the proposed Mall, the wetlands which could be preserved would be small (approximately 1.9 acres), in two segments, in close proximity to the Mall, and isolated from other vegetation between the outer ring-road, the free-standing building and the northern site portal opposite proposed Mall Drive. The northern access portal from Valley Service Road would split this wetland, and the implementation of the proposed drainage plans would reduce its sources of water. As a result, the viability and value of this wetland as a wildlife habitat would be markedly reduced.

No Feasible Relocation of Mall Drive or Northern Entrance Portal. The relocation of either the proposed Mall Drive or the northern entrance portal to mitigate potential wetland impacts is precluded by safety and engineering factors. The location of the intersection of Washington Avenue and the proposed Mall Drive is fixed due to the unavailability of undeveloped frontage along that Avenue.

The relocation of the proposed Mall Drive to the south is infeasible due to alignment difficulties between Washington Street and Valley Service Road. In addition, to the west of the Amtrack tracks, the proposed Mall Drive cannot

be shifted south because of the proximity of the Algonquin Gas Company easement. The proposed road cannot be moved south to the east of the tracks because there is no other feasible location where the road can go under them.

The northern site access portal could also not be relocated to the south, so as to lessen the splintering of the wetland in the northern quadrant. This is primarily due to several traffic engineering and safety factors. First, a more southerly portal would result in less direct access to the Mall, since vehicles would have to make a left turn onto Valley Service Road and a right turn into the Mall lot. These increased maneuvers are inconsistent with sound traffic engineering and efficiency and, in addition, would increase vehicular miles travelled and thus energy consumption. Second, the more southerly entrance (e.g., opposite the proposed G. Fox Department Store) would have insufficient vehicular storage and poor traffic control potential. Vehicles entering from Valley Service Road would directly conflict with traffic using the outer ring-road and would be likely to backup onto Valley Service Road. This occurrence would create safety problems. Finally, vehicles exiting the proposed Mall at this more southerly portal would require greater vehicular storage than would be available, and would therefore create a queue of vehicles on the outer ring-road. This congestion of the outer ring would also cause safety problems. In addition, it would increase air pollution (particularly carbon monoxide).

Limited Wetland Savings. As a result of these safety, traffic flow and traffic engineering factors, the only reasonable potential for vegetative preservation relates to the wetlands in the southeast quadrant, adjacent to Valley Service Road between the DOT ditch and the proposed detention pond. Applying

the conservative assumptions discussed earlier, a maximum of approximately 2 acres of wetland could theoretically be preserved. Approximately .9 acres of these wetlands would be those directly south and just north of the DOT ditch. These wetlands would be virtually surrounded by the Valley Service Road, outer ring-road, and the Mall entrances and would be in proximity to the Mall.

In addition to this isolation, a significant source of water for these wetlands--the DOT channel--would be eliminated. Thus, the viability of these wetlands would be markedly reduced. Furthermore, the majority of the wetlands in this quadrant is composed of shrub swamp, which is the least vegetatively diverse of the sites' wetlands. Due to these facts, the wetland would, even if preserved, have marginal value as wildlife habitat.

These areas would also not fulfill other functions generally associated with valuable wetlands. For example, they would not be appropriate to be set aside for a sanctuary or refuge because of the minimal wildlife habitat value. They would not serve as a valuable storage area for storm and flood waters, as this small area constitutes only 3 percent of the site's total storage of flood waters for a 100-year flood after development of the proposed Mall (5 acre-feet out of 144.1 acre-feet of storage). (See Appendix F: Quinnipiac River Flood Study.) The wetlands would not constitute an important recharge area for groundwater, due principally to the relatively slow rate of recharge and very small area. Since large quantities of surface water would not flow through them, the wetlands would not purify significant quantities of surface water through filtration.

The other wetlands in the southeast quadrant which could theoretically be preserved would be small remnants of the wetlands situated just south of the DOT ditch and those wetlands near the quarrying pond. These small areas (which would total approximately 1.1 acres) would be isolated between Valley Service Road, the outer ring-road and entrance roads. Like the small area of wetlands to the north which could theoretically be preserved, these small patches of wetland would have marginal value with respect to wildlife habitat and other wetland attributes.

The wetlands abutting Valley Service Road and the DOT drainage ditch that could be preserved under the 25 percent decked parking formula would be increased to approximately 2.1 acres if 50 percent of the parking for the proposed Mall was accommodated in decked facilities. Since this slight increase in size would not appreciably alter its character, the area would still possess only marginal wetland values. In a similar fashion, the small increment of the patches of wetlands discussed in the previous paragraph (to approximately 2.1 acres) would not enhance their marginal value.

Consequently, whether 25 or 50 percent of parking for the proposed Mall was accommodated in decked parking structures, minimal mitigation of the proposed Mall's impact upon wetlands would be achieved, while such decking would entail significant economic and retailing risks.

#### Multi-Level Mall Structures

The majority of the land area required for the proposed North Haven Mall will be utilized for parking facilities. Since only a small proportion of the

total land requirements for the project are necessary for the Mall structures, no significant reduction in land requirements can be achieved through the provision of multi-level structures. In addition, changing the Mall design from a two-level configuration, as currently proposed, to three or more levels would substantially increase construction costs and create a physical layout which is not desirable to shopping mall patrons.

Requirements for structures represent a small proportion, less than 15 acres, or 19 percent, of the total 78 acres needed to develop the shopping center facilities. Design alternatives that would involve the same 1.12 million square feet of retail space housed in multi-level structures might reduce the land coverage requirements for structures a maximum of 25 percent or 3.7 acres. This would represent less than a 5 percent reduction in total land requirements for the entire project.

#### Reduced Scale of Facilities

Reduced Impacts. Another possibility with respect to design changes relates to a reduction in the size of the proposed North Haven Mall. The general objective of such a reduction would be to alleviate certain environmental impacts of the Mall, and in particular to preserve additional wetlands. As discussed in this section, a significant reduction in the size and retailing diversity of the proposed Mall (i.e., by approximately 25 percent, including the elimination of an anchor department store), could facilitate the theoretical preservation of approximately five acres of primarily shrub swamp. However, these wetlands would be of marginal value because of their isolation from other vegetative areas between Valley Service and internal ring-roads.

The reduction in the size of the proposed Mall necessary to achieve these marginal benefits, together with the concomitant changes in its retailing character and attributes, would substantially reduce its capacity to satisfy the public need for the provision of regional retail facilities. It would also seriously affect Mall operations, and alter the planned for and anticipated relationship among the four anchor stores. Savings in development costs would not offset the decline in revenues that would be caused by the smaller facility and drop in productivity caused by the altered retail character.

For purposes of this analysis, it has been assumed that the proposed Mall would be reduced by approximately 25 percent, through the elimination of one anchor department store and Mall shops. The reduction has, for discussion purposes, been deemed to be proportional (i.e., a 25 percent reduction in total anchor store retail space, and a 25 percent reduction in Mall shops). Thus, the theoretical Mall being discussed would be comprised of three anchor stores, each containing approximately 170,000 square feet of retail space, and of mall specialty shops comprising approximately 330,000 square feet of retail space. Consequently, the conceptual three anchor mall would comprise approximately 840,000 square feet of retail space.

Curtailment of Public Benefits. The proposed Mall has been carefully designed with a mix of anchor stores and specialty shops required to provide a major concentration of retail activities. This concentration would provide a range and level of merchandise not now available to consumers in metropolitan New Haven.

It is this concentration of complementary anchor stores and specialty shops, together with its central location and convenient access with respect to an appreciable and growing suburban population base, which would enable the Mall to substantially improve the metropolitan area's capture of retail markets. This would occur through a reduction of sales presently lost through leakage out of the New Haven SMSA and an attraction of sales into the metropolitan area from outside communities as a result of projected Mall volumes.

Focusing only on shoppers goods, a 25 percent floor area reduction would eliminate just over 200,000 square feet in space devoted to these activities. Of this, approximately 60,000 square feet would be in mall shops and 144,000 square feet in an anchor store, thus reducing the total shoppers goods complement to 613,000 square feet from 817,000 square feet.

There is reason to expect that the small center suggested by this hypothetical shrinkage of the proposed Mall would not achieve previously projected sales levels at \$97/square foot for anchor stores and \$121/square foot for specialty shops. Productivity in this instance would likely be off since various demand components drawn to the Mall -- in the form of sales recapture, inflow, and transfers -- would be less attracted by reason of its reduced size.

Setting aside that prospect and assuming, for the moment, that the remaining stores would achieve the productivity levels noted above, shoppers goods sales at the Mall would decline by approximately \$21 million.



That volume represents retail demand that would be met elsewhere either in the form of sales redistributions in the metropolitan area (e.g. transfers) or lost through leakage and/or unrealized sales inflows.

These prospective changes in metropolitan retail outlook would also be affected by concomitant retail realignments to other sites on the part of anchor and specialty stores eliminated from the Mall (see the prior section on Alternative Sites). To the degree that retail establishments forced to leave the Mall are successful in finding other locations within the metropolitan area, some of the previously noted demand sectors (i.e., sales recapture, inflow, and transfers) may be partially met. The probabilities here, however, are that these sales cannot be restored owing to pragmatic constraints absent viable centrally located alternate choices within the metropolitan area.

The alternative sites analysis showed that the most likely location for an anchor store eliminated from the proposed Mall would be the extreme southwest sector of the market area, such as the sites identified in Milford and Orange. Forcing out an anchor store from the Mall would thus increase the likelihood of substantial additional retail development in that area. Depending upon its proximity to the City of New Haven, that addition could adversely impact upon retailing in the CBD.

If these reduced sales levels -- herein conservatively estimated at \$21 million -- proportionately affected all demand segments, or sources of sales, then transfers would be down by \$4.6 million and leakage recapture/improved inflow would be reduced by \$16.7 million. (These are 25 percent reductions from the 1990 full Mall sales estimates under a one percent annual income

growth assumption.) Under the conservative assumption of a proportionate reduction in sales, the geographical areas most affected would be the suburban fringes (north and east) of metropolitan New Haven, as those localities are now most underserved from a retail standpoint.

Depending on which anchor store might be eliminated (recognizing that this is a hypothetical example since all four anchors have understandings with the Mall developer) these impacts may vary among the three aforementioned segments of retail demand: viz. leakage recapture, improved inflow, and metropolitan transfer sales.

Illustratively, were G. Fox excluded the recapture of sales leakage and improved inflow to metropolitan New Haven would likely be substantially affected in comparison with transfer sales. These changes would be attributable to the representation of this chain at locations outside the SMSA in Meriden Square and West Farms. Absent that anchor, the North Haven Mall would lose more than a mere proportionate share of these recapture and inflow sales due to an inability to induce these segments of retail demand to remain within the metropolitan area.

Similar consequences would be expected were J.C. Penney's (again with stores in Meriden Square and West Farms) eliminated.

On the other hand the exclusion of Macy's or Sears (with stores already in the metropolitan area) might result in a greater reduction in transfer sales than presently anticipated. In this instance the current customers of these

establishments would have the option of going to a second SMSA store, albeit at a less convenient location.

Nevertheless, elimination of Sears would prevent that store from serving a broader customer base since it would forego the opportunity of operating out of an expanded and vastly improved facility such as that presently planned for the North Haven Mall. To that extent, the contributions that this establishment would have to improving inflow sales within metropolitan New Haven at a Mall location would be diminished.

With respect to Macy's, its present downtown store is paradoxically "off-center" in relation to the metropolitan retail perspective. Thus, elimination of this anchor from the Mall would disproportionately curtail the service that this organization would furnish to the metropolitan area's northeastern suburban fringe. As a result, these "lost sales" would possibly be redistributed among other anchors or, what is more likely, flow out of metropolitan New Haven to other retail locations.

In summary, reduction of the Mall's retail space would clearly diminish this regional center's ability to meet the three principal retail demand sectors noted earlier. Conservatively, this hypothetical reduction in space might be equated with a proportionate decrease in sales levels among the three sources of demand (recapture, inflow and transfer). Given the composite and complementary nature of the anchor stores already signed for the Mall it is more likely that the loss of sales among these market segments would vary according to the discrete merchandising niche and customer base that each of these stores serves. Accordingly, any reduction in the Mall would substan-

tially affect its marketing appeal and would correspondingly decrease the public service furnished by this facility as measured in terms of improved recapture and sales inflows from nearby communities.

Change in Character of Proposed Mall. This three anchor mall concept would alter the character of the proposed Mall in a number of respects, which would reduce the public benefit and pose a serious risk to the venture's retailing success.

The proposed Mall's retailing design is predicated upon the participation of four different anchor department stores, each offering a different type, range and concentration of merchandise. The merchandise that would be offered at the specialty shops would complement the merchandise associated with the anchors. The elimination of any one of these anchor stores would seriously alter this retailing arrangement, causing a number of adverse consequences.

First, because the proposed Mall has commitments from four anchors, the elimination of any one of them could lead to the withdrawal of commitments of one or more of the other anchors. Since this would alter the long-standing plans with respect to the complementary and synergistic aspects of Mall retailing, its occurrence would likely vitiate the proposal for the Mall.

The change of the relationship among the four anchors is not the only reason that the potential for withdrawal would be created. As is typical in the retail sector, each of the commitments of the anchor stores is contingent upon numerous conditions, a significant number of which would be changed by

the reduction under discussion. The affected subject matters include the onsite traffic circulation configuration, access roads, parking facilities, easements, common area designation, the extent of common utility facilities, trucking facilities and common area maintenance. The design of the proposed Mall is the result of negotiations between the applicant and each of the department stores, and could not be unilaterally altered. The understanding associated with these and numerous other conditions are embodied in documents exceeding 600 pages in length.

A reduced Mall would differ in so many respects from the proposed facility that the commitments with each anchor would probably no longer be operative. Since the anchor stores have very limited flexibility with respect to these conditions, a change as significant as the elimination of an anchor and 25 percent of the mall shops could invalidate the existent understandings.

Even conservatively assuming that the radical revisions of the complex, delicate and detailed relationship among the four committed anchor stores could be salvaged among the three remaining stores, the process of renegotiation of the terms of the commitments would likely be so lengthy and time consuming that the time frame for the Mall would become unacceptable.

In addition, there is no assurance that renegotiations would culminate in renewed commitments. The result of new negotiations with three different anchor stores, based upon a radically altered retailing schemata, are not predictable. The likelihood that the Mall would not go forward under the conceptual three anchor facility is thus increased.

Contemplation of a reduction in Mall size would also raise a paramount issue as to how this might be accomplished. Illustratively, if one department store was to be eliminated, profound questions as to which company might be selected would be raised, since there is a commitment between the developer organization and each of these major department stores. Questions of the abrogation of an existing contract and the potential exposure to the developer (both direct and indirect), would likely arise from this reduction. This issue, like the others just discussed, therefore goes to the heart of the existence of the proposed Mall.

In addition, the probable disproportionate decrease in revenues described in this section would create an additional economic risk, particularly since they would not be offset by cost savings. Land acquisition costs would remain essentially identical, as would construction costs of the off-site transportation modification areas, on-site transportation facilities, utilities and the drainage system. The savings from the reduction of parking, taking into account the lessened amount of fill that would be needed, would total approximately \$1.4 million. The savings in the preparation of building foundations and construction of the shell for the Mall shops roughly proportional to the reduction in size, would be approximately \$5.5 million. Thus, the total savings from the reduced Mall would be approximately \$6.9 million, which is between 20 and 23 percent of the developer's construction costs. (These figures exclude soft costs.) Revenues, on the other hand, would decrease by at least 25 percent, if not more, due to the reduction in size and probable decline in productivity.

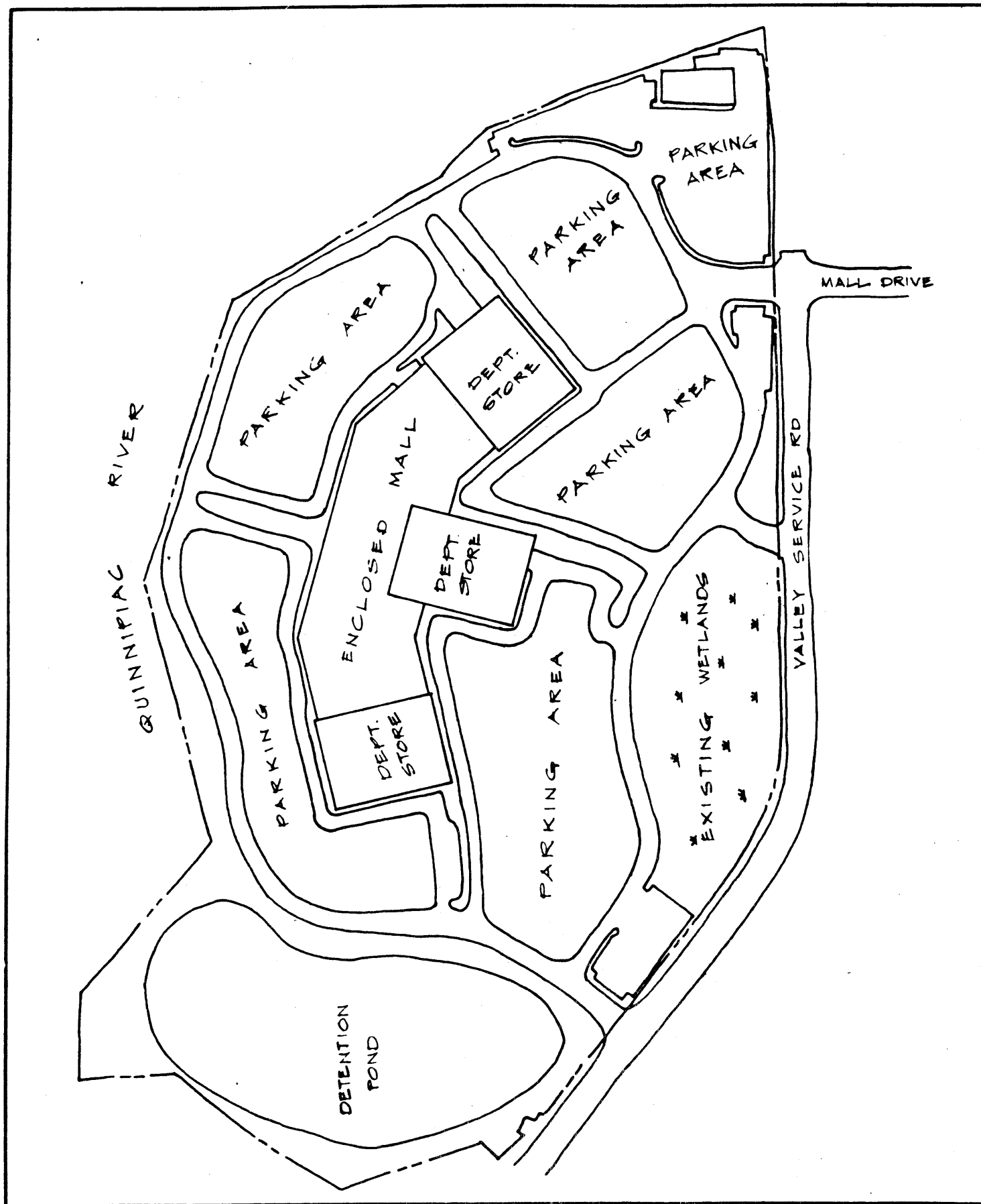
For the information of the reader, the applicant has expressed the view that the 25 percent reduction of the proposed Mall is not a feasible or practicable alternative for implementation, due to the reasons discussed in this section.

Other Diminished Benefits. A smaller facility would diminish other benefits that would be associated with the proposed Mall. In addition to a roughly proportional reduction of fiscal benefits to the Town of North Haven, there are also regional losses, some of which are outlined below.

The stimuli to the area's economic base that would be provided by the increases in regional retail activities would be curtailed, particularly since the proposed Mall's capacity to recapture outflow would be markedly reduced.

A reduction in the size of the Mall would cause a roughly proportionate decrease in the approximately 2000 permanent jobs directly created through Mall operations. The projected stimulus of general economic activity in the region generated by projected new wages, including the construction industry, would also be affected.

Energy-influenced shopping patterns also would be negatively impacted by a reduction in the Mall size. A recent study by the American Retail Federation ("Americans View the Energy Crisis and its Impact on Consumer Behavior," the American Retail Federation, 1980) indicates that consumer efforts to conserve gasoline would tend to generate fewer, more extensive shopping trips to concentrations of retail goods, such as the Mall, as compared with neighborhood facilities. Any reduction in the Mall size, therefore, would affect its con-



NORTH HAVEN MALL

VALLEY SERVICE ROAD

NORTH HAVEN, CONNECTICUT

CONCEPTUAL 3  
DEPARTMENT STORE MALL



FIGURE 3



centration of merchandise and consequently reduce the opportunity for the consumers to satisfy their shoppers goods needs at a single location.

Limited Mitigation of Wetland Impacts. In order to address the potential savings of wetlands that might be achieved through a reduced mall, a conceptual three anchor design was prepared.\* The resultant sketch is reflected in Figure 3. This concept utilizes a standard three anchor mall design and a typical parking ratio. The ring-roads and storefront roads would provide adequate ingress and egress to the Mall. The parking facilities would provide adequate pedestrian access to each of the anchor stores.

As discussed in the earlier section of this appendix on decked parking, most of the wetlands on the western half of the site are scattered and of small acreage. (See Figure 2 in decked parking section.) As with the footprint for a four anchor mall, the footprint of the conceptual three anchor mall would require the filling of virtually all of the smaller wetlands on the western portion of the site. Accordingly, the only wetlands which can practically be considered in terms of mitigation are those in the northeast and southeast quadrants.

As discussed in the section on decked parking, the northern entrance portal to the site cannot be shifted to the south due to traffic engineering and safety factors. In addition, the proposed Mall Drive could not be relocated to the south due to alignment difficulties and the proximity of the Algonquin Gas Company easement. Since the wetlands in the northeast quadrant

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\* As indicated previously, the design for the proposed Mall is a result of negotiations between the applicant and each of the four department stores.

are bifurcated and isolated because of the northern portal, the only reasonable potential for vegetative preservation lies with the wetlands in the southeast quadrant.

The conceptual three anchor mall design shows that approximately five acres of wetlands, situated just south of the DOT ditch and west of the Valley Service Road, could theoretically be preserved in the southeast quadrant (see Figure 3). This would be accomplished by aligning the outer ring-road around the wetlands and moving the middle entrance portal for the proposed Mall slightly to the north of where it would otherwise have been located.\*

The wetlands would be entirely surrounded by Valley Service Road, the middle entrance portal, the ring-road and adjacent parking. The DOT channel, which is a significant source of water for them, would be eliminated by the conveyance of surface water drainage to the detention pond (which would still be located to the south of the ring-road). Virtually all of the wetland preserved would be shrub swamp, which possesses the least vegetative diversity of any of the site's wetlands. As a result of these factors, the wetlands would, even if preserved, have a very limited value as wildlife habitat.

This area's value for storage of storm or floodwaters is minimal, given that the storage value of all of the site's wetlands is less than 1% of the total floor volume (Appendix B: Vegetation, Wildlife and Wetlands.) Further, this area would constitute only 7 percent of the site's total storage of

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\* The relocation of the middle portal, necessary to preserve wetlands, creates additional turns when entering the parking lot. This is not desirable from a traffic engineering viewpoint.

floodwaters for a 100-year flood after development of the proposed Mall (10.1 acre-feet out of 144.1 acre-feet of storage. See Appendix F: Quinnipiac River Flood Study.) Since the surface water flows through the wetlands would be severely curtailed, the area would not serve important functions with respect to purification. There would be minimal recharge function served, as most of these wetlands are characterized by low coefficients of permeability, and the remainder are underlain by thick clay deposits and serve negligible, if any, recharge function. There would be no basis for setting aside this area as a refuge or sanctuary because of its small size, its isolation and its marginal value as a wildlife habitat.

#### ALTERNATIVE USES OF THE PROPOSED NORTH HAVEN MALL SITE

This section discusses alternative uses of the North Haven Mall site. Potential alternative uses are identified through applicable zoning ordinances and permissible uses are assessed pursuant to a market analysis which takes into account relevant economic and land use trends in the New Haven Metropolitan region.

The site of the proposed North Haven Mall is currently vacant of any building improvements. The southern portion of the site, however, has recently been used for quarrying operations and processing continues to take place. Bordered on the west by the Quinnipiac River, the site is south of the Pratt & Whitney industrial complex. East of the site, but separated by an active railroad right-of-way, are numerous commercial establishments lining Washington

Avenue. The site is zoned for industrial uses and is accessible to transportation and infrastructure connections, and a regional shopping center is a permitted use.

If the Mall is not constructed, the issue arises as to what alternative use the sight might be put. Market demands for potential alternative uses -- mining, industrial, office, residential and recreational -- are examined below, and associated development opportunities for the site are assessed. A summary comparison of the possible alternative uses of the site is set forth in Table 4. The analysis indicates that a continuation of traditional quarrying activities represents the most probable and foreseeable alternative use at the site if development of the proposed North Haven Mall were not to proceed.

#### Industrial Development

Regional Projections. Industrial-related employment (manufacturing, construction, transportation, communications and utilities) in the New Haven labor market (defined as the New Haven-West Haven SMSA) suffered declines between 1972 and 1977 -- about 1.7 percent annually. With an improving economy, these employment declines were reversed slightly in the following three-year period, increasing at an annual rate of 0.9 percent. Industrial employment in the SMSA is expected to increase at an annual rate of about 0.3 percent through the year 2000.

Projections of industrial-related employment for the New Haven metropolitan area suggest supports for an additional 2 million square feet of industrial

**TABLE 4**  
**SUMMARY COMPARISON OF ALTERNATIVE USES OF THE SITE**  
**(NO-BUILD ALTERNATIVES)**

Use	Mall	Industrial/Commercial	Park	Continued Present Activities
Need	To provide the metropolitan New Haven area with a concentration, depth and variety of shopper goods merchandise not now available.	Regional demand for industrial/commercial acreage will increase by only 280 acres between 1980 and 2000. There are a multitude of sites available in the New Haven area (including 2 in North Haven with a combined acreage of 192 acres) to fulfill this need.	The town currently has an abundance of open space and recreational land, 42 acres per 1,000 population. This ratio exceeds accepted national and state standards.	Portions of the site are presently being used for quarry-related activities.
Likelihood of Occurrence	Only development option being actively pursued. Mall construction would begin when all permits were granted and approvals received.	Competition from other towns, current development of two other North Haven sites for industrial and office purposes, and the cost of infrastructure make it unlikely that this site would be developed for industrial or office uses.	Since the town has adequate passive park land, it has no plans to acquire any additional property for parkland in the vicinity of the proposed site.	Resumption of sand and gravel quarrying on the privately-owned central and southern portions of the site would occur without the proposed mall.
<b>Likely Impact:</b> <ul style="list-style-type: none"> <li>● Geology, Groundwater, Soils and Topography</li> <li>● Surface Water and Water Quality</li> <li>● Vegetation, Wildlife and Wetlands</li> <li>● Archeological Resources</li> <li>● Flooding</li> <li>● Traffic</li> <li>● Air and Noise Quality</li> <li>● Utilities and Infrastructure</li> <li>● Socioeconomic Resources</li> </ul>	<p>Would reduce existing erosion levels and raise surface elevation. Groundwater quantity and quality would not be significantly affected.</p> <p>No contravention of water quality standards is anticipated.</p> <p>There would be development of 78 acres of diverse vegetation and wildlife habitats, including 25 acres of wetlands. Some displacement and mortality of non-endangered species wildlife would occur.</p> <p>Could affect three sites with archeological potential.</p> <p>No measurable impact on flooding in the Quinnipiac River is expected. Stormwater discharge to the river would be reduced for large storms.</p> <p>Mall-related traffic would not cause the level of service to fall to unacceptable levels on any of the access roads.</p> <p>No significant impact.</p> <p>Construction of connection lines to sewerage and improvements to water systems are needed. Local road modifications are necessary to accommodate mall traffic. The mall could contribute to the town's short-term solid waste disposal problems.</p> <p>Enhancement of the regional economy (2,000 new permanent jobs) as well as the local economy (\$1 million in new annual tax revenues) would occur.</p>	<p>Depending upon the actual design, impacts could be similar to or greater than those of the proposed mall.</p> <p>Impact would depend upon actual use (i.e., heavy industry could cause serious problems).</p> <p>Depending upon the actual design, impacts could be similar to those of the proposed mall.</p> <p>Depending upon the actual design, impacts could be similar to those of proposed mall.</p> <p>Depending upon actual design, impacts could be similar to those of the proposed mall.</p> <p>Since traffic associated with these activities normally occurs during peak rush-hour periods, depending upon size and type of activity, traffic problems could result.</p> <p>Depending upon activity, on-site use may cause traffic congestion and result in increased air and noise pollution.</p> <p>Depending upon the actual use and infrastructure needs, impacts could be similar to or greater than those of the proposed mall.</p> <p>Demand for industrial/commercial use for this site is limited; socioeconomic benefits would likely be small.</p>	<p>Limited impact would depend upon type of recreational use.</p> <p>Limited impact would depend upon type of recreational use.</p> <p>Limited impact would depend upon type of recreational use and design of recreational facilities.</p> <p>Limited impact would depend upon the design of recreational facilities.</p> <p>No measurable impact.</p> <p>No impact.</p> <p>No impact.</p> <p>Some road improvements would be required. Water and sewer improvement could be necessary.</p> <p>An opportunity to realize economic growth and consumer benefits associated with mall development would be lost. The town would incur increased tax burden through costly acquisition of private parcels and consequent reduction in tax rolls.</p>	<p>The potential for erosion would increase, and surface elevations would be reduced.</p> <p>Suspended sediments in the Quinnipiac River would increase.</p> <p>There would be a loss of wetland vegetation and wildlife habitats, and displacement of wildlife species.</p> <p>No impacts.</p> <p>Could provide increased water storage capacity. Maximum available site storage would not significantly impact on flooding in the Quinnipiac River.</p> <p>No impact.</p> <p>No impact.</p> <p>No impact.</p> <p>An opportunity to realize economic growth and consumer benefits associated with mall development would be lost. Town tax revenues would not increase.</p>
Would regional retail need be satisfied?	Yes. Project would satisfy need for increased retail activities.	No. Would not satisfy need.	No. Would not satisfy need.	No. Would not satisfy need.

space by 2000. This implies a land area requirement of about 230 acres, under the following assumptions:

- o While industrial employment is expected to show modest growth over the next thirty years, it will be at a much slower rate than overall employment increases. In other words, it is anticipated that the area's economic base will continue shifting towards non-manufacturing employment. For example, where industrial employment, as of 1979, represented roughly 25 percent of total private employment, it is projected that by the year 2000 industrial employment will represent 23 percent of the total private employment;
- o For the New Haven labor market area as a whole, these annual changes in industrial employment were translated into supportable square feet by conservatively assuming an employment density of 600 square feet per employee, and then translated into supportable acreage by assuming a Floor Area Ratio of 20 percent (that is, actual building space represents 20 percent of required industrial land).
- o The resultant figures for supportable square feet and acreage represent net new industrial activity, but are not to be taken as projections of new industrial space construction. For example, new industrial construction and new acreage demand may exceed these numbers but be offset by industrial closings or relocations and possible abandonment of older industrial space. Likewise, new industrial activity may also be accommodated in presently vacant industrial space (such as the Federal Paper Board complex in New Haven).

These industrial potentials are displayed in tabular form on Table 5.

North Haven Prospects. With these labor market area projections in hand, historical "capture rates" for the project area were reviewed and future rates projected.

Between 1970 and 1975, according to figures published by the Connecticut Department of Commerce, approximately 13.7 million square feet of new and expanded industrial space was constructed in the region between 1980 and the year 2000. During this period, North Haven was the major single benefactor of this industrial construction, capturing 3.5 million square feet or 26 percent

of the region's total. Some of the firms which built space in the town include the Johnstone Company, City Printing, Data Documents, and others.

Industrial development since 1975 in North Haven, however, has been slow. Information from building permits indicates that less than 300,000 square feet of new industrial space has been constructed in the last five years. None of the building permits issued has been for space in excess of 45,000 square feet.

In addition to the Mall site, there are two major parcels within the town suitable for industrial development. The first is a 63-acre parcel on Bailey Road and the second is a 129-acre former Penn Central Railroad parcel on Terminal Road. Both sites are being actively marketed for new industrial development and one has reportedly been optioned by a development firm.

Other communities in the region have been active in developing and promoting their industrial parks as well. Wallingford, for example, has been particularly successful in attracting industrial development with more than 2 million square feet of industrial space developed in the Barnes Industrial Park.

The site for the proposed Mall, were it put to industrial use, could accommodate between 700,000 and one million square feet of industrial space or 35 to 50 percent of the total amount of supportable industrial space projected for the entire New Haven region. Given the modest projected increases in industrial employment and space, the increased competition among towns for these facilities, and the absence of any major industrial construction in the Town of North Haven over the last five years, it is anticipated that, at most,

Table 5  
INDUSTRIAL POTENTIALS  
NEW HAVEN-WEST HAVEN SMSA  
1979-2000

	1979	1980	1985	1990	2000	Average Annual Change							
						1979-1980		1980-1985		1985-1990		1990-2000	
						Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Private Employment <sup>1/</sup>	163,000	164,000	172,000	180,000	190,000	1,000	0.6%	1,600	1.0%	1,600	0.9%	1,000	0.6%
Percent Industrial Using	25.3%	25.0%	24.5%	24.0%	23.0%	--	--	--	--	--	--	--	--
Industrial Using Employment	42,000	41,000	42,100	43,200	43,700	-1,000	-2.4%	220	0.5%	220	0.5%	50	0.1%
Employee Density (s.f. of space/employee)	600	600	600	600	600	--	--	--	--	--	--	--	--
Supportable Industrial Space (millions of s.f.)	25.2	24.6	25.3	25.9	26.2	-.60	-2.4%	.14	0.6%	0.12	0.5%	0.03	0.1%

<sup>1/</sup> Excludes government which is estimated at 14.0% of total employment.

Source: State of Connecticut, Department of Transportation; Gladstone Associates.



15 to 20 percent of the industrial development projected for the region might occur in the Town of North Haven -- representing 300,000 to 400,000 square feet.

If the proposed Mall site were to capture all of this industrial development, approximately 20 to 26 acres of the site would be utilized. This represents approximately 25 to 30 percent of the site's buildable area. Under foreseeable conditions, it is unlikely that industrial activities could be attracted to this site because of unfavorable infrastructural cost requirements and the availability of other desirable sites nearby.

Economic Viability. With any of the alternative development schemes described in this section, there is a question as to economic viability. Specifically, there are substantial fixed costs associated with off-site road and utility improvements regardless of the scale of development that takes place. If a large enough amount of space and acreage is developed, then such fixed costs can be sufficiently "spread" or allocated so as to achieve economic viability. On the other hand, if these costs cannot be broadly enough allocated then the ultimate per acre or per foot costs will be pushed above levels that are supported or justified by achievable market value or income.

At a minimum, industrial development of the site would require improvement of Valley Service Road to provide adequate access to the site and extension of utility lines to the site. While precise cost figures are not available for these improvements, it is estimated that such costs might be on the order of \$3 to \$3.7 million. If these costs are spread over 80 acres of development (as in the case of the proposed Mall) versus the 25-30 acres

represented by an industrial (or office) alternative, then the costs per acre would be reduced by \$50,000 -- to unit costs ranging from approximately \$80,000 per acre (with 30 acres developed) to \$30,000 per acre with 80 acres developed. Such a cost differential would make such small scale alternatives economically infeasible. For a small project, the rate of tax return to the Town would probably be insufficient to support a bond issue necessary to finance required infrastructure development.

In conclusion, it is not probable that any portion of the proposed North Haven Mall site would be developed for industrial activities in the foreseeable future if the Mall were not built. Such development would require costly construction of access roads, sewer and water mains and other infrastructure. Other more suitable sites within the town -- in particular, the Bailey Road site which is being actively marketed for industrial development -- is more likely to capture new industrial activities that would locate in North Haven.

#### Office Development

As industrial-related employment continues to decline in relative importance in the New Haven region, office activities--finance, insurance, services, etc. -- are expected to increase in relative importance, carrying with them increased demand for office space. Office employment within the region is projected at 28 percent of total employment by 2000 (see Table 6).

Downtown New Haven has historically been the center of financial and office activities for the metropolitan area. It is expected that downtown New

Table 6  
OFFICE POTENTIALS  
NEW HAVEN-WEST HAVEN SMSA  
1979-2000

	1979	1980	1985	1990	2000	Average Annual Change							
						1979-1980		1980-1985		1985-1990		1990-2000	
						Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Private Employment <sup>1/</sup>	163,000	164,000	172,000	180,000	190,000	1,000	0.6%	1,600	1.0%	1,600	0.9%	1,000	0.6%
Percent Office Using	25.9%	26.0%	26.5%	27.0%	28.0%	--	--	--	--	--	--	--	--
Office Using Employment	42,200	42,600	45,600	48,600	53,200	400	0.9%	600	1.4%	600	1.3%	460	0.9%
Employment Density (s.f. of space/employee)	200	200	200	200	200	--	--	--	--	--	--	--	--
Supportable Office Space (millions of s.f.)	8.4	8.5	9.1	9.7	10.6	0.1	1.2%	0.12%	1.4%	0.12	1.3%	0.09	0.9%

<sup>1/</sup> Excludes government which is estimated at 14.0% of total employment.

Source: State of Connecticut, Department of Transportation; Gladstone Associates.

Haven would continue to attract a significant share of the new office space projected for the region.

Within the last four to five years, only 35,000 square feet of office space has been constructed in the Town of North Haven (see Appendix L: Economics and Land Use). Even assuming that over the next ten years the town might be successful in attracting five to ten percent of the regional market, or 60,000 to 120,000 square feet, this implies a demand for 2.3 to 5.0 acres of land. This amount of office development could be easily accommodated on the buildable area of the proposed mall site. Devotion of the site exclusively to office space would utilize less than seven percent of the buildable area of the site.

Further, in light of the necessary costs for infrastructure construction, the North Haven Mall site would not represent a competitive location for office development under a no-action alternative. There are a number of smaller sites, between two and ten acres along major roads, which could easily accommodate development of 60,000 to 120,000 square feet of office space projected for North Haven. It is, therefore, concluded that office activities would not represent a reasonably foreseeable alternative use of the proposed Mall site.

#### Residential Development

Population in the Town of North Haven is expected to increase by 1,200 in the next 20 years. With continuing anticipated declines in average household size, town-wide, a net addition of 600 new households is projected through the year 2000 (see Table 7). This household growth would likely generate a demand

for approximately 700 housing units, including replacement demand and allowance for realistic vacancy rates.

The site of the proposed mall is not likely to experience pressure for development as a residential location and is not zoned for residential use. The surrounding land uses -- industrial and commercial -- are incompatible with residential development opportunities offered elsewhere in the town. Also, there is sufficient land available in existing residential neighborhoods to satisfy projected demand. This site would not be highly competitive for residential development.

#### Park and Recreational Development

In the Town of North Haven, there are more than 900 acres of park and recreation land, not including fields and play areas associated with schools. This ratio of 42 acres of public open space per 1,000 residents compares favorably with the state standards of 15 acres per 1,000 residents (see Appendix M: Community and Visual Quality).

Most of the town's recreation land is currently devoted to passive uses (i.e., when no significant man-made alteration of the natural environment are required), including Quinnipiac State Park, Wharton Brook State Park, Peter Rock Park and the Hansen property. The town ratio given above breaks down to 40 acres of passive recreation lands and two acres of active recreation land per 1000 residents. It is the Town's position that it currently has more than adequate passive recreational facilities, and it therefore does not intend to actively pursue acquisitions of this type.

Table 7

POPULATION TRENDS AND PROJECTIONS  
NORTH HAVEN  
1970-2000

	<u>1970</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>
Population	22,194	23,960	24,480	25,150
Average Household Size	3.53	3.3	3.25	3.2
Number of Households	6,251	7,260	7,532	7,859

Source: U.S. Census; State of Connecticut, Office of Policy and Management;  
Gladstone Associates.

The southern areas of the proposed Mall site are privately owned (approximately 18 acres) and thus could not be used for recreational purposes without costly acquisition or condemnation by the Town of North Haven. The Town has not expressed any intent to acquire this property. The northern areas of the proposed North Haven Mall site, owned by the Town (approximately 19.17 acres), could be used for recreational purposes, but such use would be incompatible with long standing economic development and land use policies of the municipality. The Town has designated this area as a location for commercial and industrial development. The Town has not indicated any intent to deviate from that policy for either the southern or northern portions of the site. Such use would also be incompatible with regional and state plans (see Appendix M: Community and Visual Quality).

Furthermore, the proposed Mall site is not suitable for active recreational uses (i.e., uses requiring significant man-made alterations of the natural environment, such as baseball diamonds), and there are better sites for appropriate recreational facilities within the Town. First, development of additional active recreational sites to serve the needs of future residents might be better situated in several smaller locations throughout the town, closer to areas of projected new residential growth. Second, without major road improvements, the site is generally inaccessible.

Finally, construction of active recreational facilities on the proposed site would be expensive due to the particular topographic and soil conditions present, as well as to the need to construct access roads and other infrastructure improvements. This would require a commitment by the Town, which is unlikely based upon current zoning and comprehensive planning.

Due to the incompatibility of the site with land use policies and the unsuitability of the site for active recreational facilities which would best meet the recreational needs of North Haven residents, it has been concluded that development of recreational uses is not a practicable or likely alternative use for the proposed North Haven Mall site.

#### Mining Operations

As noted, the North Haven Mall site has recently been used for sand and gravel quarrying and is still in use for closely related processing operations. Based on discussions with mine operators it is probable that mining would be resumed if the Mall were not developed. Approximately half the site is owned by the Town of North Haven and half is owned privately. Mining activities are likely to be immediately resumed on the privately owned central and southern portions of the site in the event that the North Haven Mall project did not proceed.

In terms of assessed tax value, job creation or meeting public needs, this use is less preferable than any other alternative use. However, as a practical matter, the resumption of sand and gravel quarrying represents the most likely alternative use of the North Haven Mall site.

#### Combined Use

Some combination or mix of uses has been considered for this site, without the Mall. As noted above, market prospects for office and industrial space in the Town of North Haven are likely to be limited to some 25 to 30



acres through the year 2000. However, as discussed in the previous discussion of each activity individually, costly requirements for infrastructure construction necessary for use of the Mall site and competition from other sites with less difficult development requirements are likely to minimize active interest in development of this parcel for such mixed land use development.

### Summary

To summarize briefly, examination of a variety of alternative uses for the proposed North Haven Mall site indicates that very few practical options to use of the Mall site exist, in the event that the Mall project were not to proceed (the no-action alternative). Limited future demands for space, the Town's desire to maintain its currently zoning, the necessity for expensive infrastructure improvements to the site and the availability of other desirable parcels for development in the Town of North Haven preclude industrial, office, or recreational development as practical alternatives in the foreseeable future. Residential development would be incompatible with various characteristics of the Mall site, including nearby industrial land uses. The portion of the site available to the Town is unsuitable for active recreational uses, which are the only park functions needed in the Town of North Haven.

The most probable alternative use, assuming that the North Haven Mall project were not to proceed, would be a resumption of sand and gravel quarrying activities, which had previously been active on the privately owned central and southern portions of the site. In terms of generating local tax revenues or satisfying public retail needs, this is the least preferable of the various alternatives that have been examined.

The analysis of alternative uses for the Mall site indicates that, as the result of market factors governing demand for developable land in the metropolitan area, the Town of North Haven would probably not be able to achieve its stated goals for economic growth if the proposed North Haven Mall was not constructed. No realistic opportunities for other types of development are available to the Town which would generate comparable benefits in terms of tax revenues, creation of infrastructure or potential attraction of ancillary growth prospects.

#### ENVIRONMENTAL IMPACTS OF THE NO-ACTION ALTERNATIVE

The previous section has demonstrated that the only reasonably foreseeable alternative use for the site, should the North Haven Mall not be developed, is the resumption of the mining and quarrying activities on the privately owned southern portion of the site, and continuation of existing conditions on the Town-owned northern portion of the site. This final component of the alternative analysis discusses the public environmental impacts of this scenario.

#### Geology, Groundwater Resources, Soils and Topography

Ownership of the land onsite by those parties responsible for the continuation of quarrying is limited to the central and southern portions of the site. Thus, it is assumed that sand and gravel removal would be confined in this area. Continued mining would likely result in the removal of existing vegetation and soils, thus increasing the erosion potential of the affected area and the likely quantity of sediment contributed to the Quinnipiac River

by the site. The removal of additional materials would also result in alterations to the existing topography, further reducing surface elevations.

Existing recreational uses of the site are primarily limited to target shooting, limited fishing, hiking, and trailbiking. No significant impacts are anticipated to occur as the result of fishing or hiking activities. Trailbiking activities, however, tend to compact the topsoil, limit the establishment of vegetation and, consequently, increase the erosion potential of areas driven upon and seriously disturb wildlife.

#### Surface Water Resources and Water Quality

It is very likely that the continuation of hydraulic mining operation would both expand the extent of onsite surface waters and contribute to the turbidity of the ponds. Thus, water entering the Quin nipiac River from the site would result in a higher contribution of suspended sediments than under either existing conditions or subsequent to the construction and operation of the Mall.

No water quality or aquatic biological impacts are anticipated from the continuation of those recreational activities which presently occur on the site. Continuation of present recreational activities would likely involve no alteration in local and regional traffic patterns which, in turn, would not involve contamination of water. Additionally, there would probably be no construction to add to the present suspended sediment load of the Quin nipiac River.

### Vegetation, Wildlife and Wetlands

Vegetative impacts associated with continued mining activity primarily include the loss of wetland vegetation and wildlife habitat, particularly in shrub swamp and marsh communities (Wetlands B, C, and D). It is likely the vegetation established in the disturbed area since the suspension of mining would also be removed by resumption of mining and that the amount of open water areas would be expanded. Such potential activity would effectively displace the majority of wildlife species presently using the central and southern portions of the site.

Noise generated by the continuation of shooting and trailbiking would affect existing wildlife on the site, while trailbiking would have a continued adverse effect on localized areas of vegetation. Other current recreational activities such as fishing and hiking only minimally effect vegetation and wildlife.

### Archaeological Resources

Assuming the resumption of mining activities in the central and southern portions of the project site, it is likely that no sites of potential archaeological significance would be affected. This is due to the area's existing disturbed conditions and, thus, its low archaeological potential.

It is assumed that sand and gravel removal would be confined to this area. However, if for any reason mining should occur in the relatively undisturbed portions of the site to the north or in the vicinity of the proposed Mall

Drive opposite the project area, three sites potentially eligible for nomination to the National Register of Historic Places would be adversely affected. (See Appendix O: Archaeology.)

The continuation of existing recreational activities is not expected to significantly affect archaeological resources located on the project site. During field investigations, however, several unearthed areas, not associated with the archaeological investigation reported in Appendix O, were observed in the vicinity of the proposed Mall Drive. It is thus likely to assume that excavations to recover archaeological remains have been conducted in the general project area. This was, in fact, confirmed by an adjacent land owner.

#### Economic Impacts

Preventing development of the proposed North Haven Mall (the no-action alternative) would result in continued substantial economic impacts affecting the entire New Haven SMSA, as well as the potential for growth and economic development in the Town of North Haven. The no-action alternative would continue to promote existing conditions, which do not maximize the area's retail activities, economic base, municipal finances, land use planning and energy conservation. The following discussion focuses on specific economic implications of the no-action alternative with respect to regional level impacts, local effects on the Town of North Haven and probable regional trends for existing retail facilities.

Regional Impacts. The proposed North Haven Mall would represent a substantial addition to the economic base of the New Haven metropolitan region

and provide expanded retail services available to consumers within the region. Various economic benefits that are projected to be generated by growth in regional retail industries would be lost if Mall development was precluded under the no-action alternative.

For example, there would be a significant diminution in the region's ability to capture the retail market potentials from both inside and outside the New Haven SMSA. Since the North Haven Mall has been designed as a shopping magnet of sufficient strength to draw from a significantly wider trade area than the SMSA, it would improve sales in-flows from the communities bordering the metropolitan area. More importantly, because the Mall would provide a concentration and type of retail shopping now available in the SMSA, it would recapture sales that have been "leaking" out of that area. These sales increases would be substantially beyond the growth that might be anticipated as a result of increases in population and affluence within the market area.

The retail impacts analysis conducted for the proposed North Haven Mall indicated that retail sales in the New Haven SMSA, which totaled \$374.8 million in 1977, would be in the range of \$368.3 to \$408.3 million by 1990 under baseline conditions without the addition of the Mall. Assuming these baseline conditions, the "leakage" of regional retail sales out of the region is expected to increase from \$66.4 million in 1977 to between \$70.4 and \$80.2 million (in constant 1977 dollars) by 1990. This range reflects potential variations in real income growth (see Appendix L: Economics and Land Use).

With the addition of the North Haven Mall, metropolitan retail sales are projected to be \$426.9 to \$474.9 million in 1990, an increase of 16 percent.

The new Mall facilities are projected to reduce regional sales leakage to \$29.1 to \$33.3 million in 1990. Such gains in retail sales would not occur under the no-action alternative.

The range and variety of retail merchandise available within the region would be expanded by the introduction into the market area, with the North Haven Mall, of one major department store not represented there (G. Fox), the expansion of two others (Sears and J.C. Penney), and the deepening of another's ability to more fully serve consumers in the metropolitan area (Macy's). Other smaller establishments that would locate in the new regional mall would also provide net additions to the range of goods and services available to area consumers. These retail outlets would attract new business to the region. Even if some of the tenants in the new mall were new branches of local firms, they might be a welcome expansion opportunity and a source of added convenience to customers.

In addition to generating these benefits for the consuming public, the introduction of a major new retail facility would enhance competition amongst the shoppers goods merchants. Increased competition would tend to reduce prices and stimulate the upgrading of existing facilities. These substantial benefits to the consuming public would not be realized under the no-action alternative.

Without the proposed North Haven Mall, much first-line comparison shopping will continue to be done outside the SMSA by area consumers, with a resultant higher level of automobile fuel consumption and loss of time. There would be no regional retailing focus strong enough to effectively compete with

major centers outside the SMSA or to serve the full breadth of the regional market. Analysis of regional shopping patterns indicates that the North Haven Mall would result in a reduction of approximately 12,000 vehicle miles per day of automobile travel (see Appendix H: Transportation). These energy savings would not be achieved absent the Mall.

The North Haven Mall would generate employment opportunities for residents of the region. Construction of the Mall would generate 11,000 person-months of employment and \$21.8 million in wages and salaries in the construction industry. At least 45 percent of the total construction jobs created are anticipated to be filled by residents of the New Haven labor market area.

Operation of the North Haven Mall would create a net addition of 1250 to 1400 permanent jobs for regional residents, even after assuming the largest projected number of retail job transfers. These jobs would generate approximately \$8.2 to \$9.5 million in wages annually and represent a net increase of 3 percent in total regional employment in the retail and wholesale trade. These economic stimuli to the economy, which may be increasingly important in light of potential reductions in levels of federal spending, would not be generated if development of the North Haven Mall does not occur.

Local Impacts. The Town of North Haven would be able to substantially expand its economic base through development of the proposed North Haven Mall. The Mall is projected to generate a surplus of tax revenues over public service costs to the Town, estimated conservatively to exceed \$1 million annually. These revenues are sufficient to reduce property taxes by 6 percent within the



Town of North Haven, from the current tax rate of \$46.30 per thousand dollars of assessed valuation to \$43.40. (See Appendix L: Economics and Land Use).

Consequently, the Town of North Haven would lose a major opportunity for economic growth and expansion of its tax base if the North Haven Mall were not developed. Alternative uses showed that no other development opportunities are reasonably supportable at the Mall site, thereby not adding to the Town's present economic base. The Town's investment in the construction of the Valley Service Road in 1971 to open this part of its commercial/industrial corridor for development, would be lost. (See Appendix M: Community and Visual Quality.)

Impacts on Existing Regional Centers. Finally, based on the retail impact and alternative analysis, certain trends in regional retail patterns were identified as most likely to occur under the no-action alternative.

Several locations in the southwestern segment of the area (e.g. Milford and Orange) would represent the most viable alternative shopping center sites. Added retail services in these southwestern locations would not provide market coverage to regional residents which would be comparable to that of the proposed North Haven Mall. However, new shopping facilities at these locations would capture portions of the New Haven metropolitan retail market and thus shift sales away from existing retail centers in the region, including the New Haven CBD.

New Haven's redevelopment and commercial area problems would persist unchanged. Downtown would still need an improved image and strong special

attractions to bring people into the area if growth or reinvestment prospects were to be realized. These prospects would not likely include new department stores in the central business district, in any event. Continuing declines in the City's population and in the percentage of aggregate income spent by that population in shoppers goods provide no reasonable basis to predict a shift in retailing trends or a radical change in the locational strategies of anchor stores that would cause them to locate in the CBD.

In conclusion, the no-action alternative would result in the area's maintenance of its present retailing position without the potential to realize the economic growth and consumer benefits associated with the proposed North Haven Mall development. At the regional level, the potential for recapturing a substantial portion of current retail sales leakages would not occur, along with the employment opportunities that are projected to be generated by expanded retail activities. Residents of the region would forego consumer benefits derived from having an expanded range of retail services available, a heightened level of competition among area retailers and better transportation access to outlets for shoppers goods.

The Town of North Haven, which would derive substantial tax revenues from the proposed Mall, would incur the most severe economic impact of any group in the region under the no-action alternative. If the Mall were not developed, North Haven would have no realistic opportunity for an alternative site development which would meet its long-term planning and investments to achieve economic development and maintain fiscal stability.

NORTH HAVEN MALL ENVIRONMENTAL ANALYSIS  
ALTERNATIVES TO THE PROVISION OF THE PROPOSED RETAIL SERVICE FACILITIES

ATTACHMENT A  
LIST OF INTERVIEWS

Mr. Norris C. Andrews, Executive Director  
Regional Planning Agency of South Central Connecticut

Mr. Mark Birch, City Planner  
Town of Meriden

Mr. Dominick Caruso, Director of Planning  
Town of Meriden

Mr. Scott Cleveland, Assistant Development Administrator  
City of New Haven

Mr. Peter W. Crabtree, Assistant City Planner  
Milford Planning and Zoning Commission

Mr. Lee Davies, Traffic Engineer  
Town of Hamden

Mr. Paul Denise, Zoning Enforcement Officer & Administrator  
Town of Orange

Mr. Carmine DiBattista, Assistant Development Administrator  
City of New Haven

Mr. James J. Doody, Planning and Zoning Administrator  
Town of Branford

Mr. Charles Howland  
V. Benedict Companies, Hamden

Mr. John Moss, Planning and Zoning Administrator  
Town of Branford

Mr. Roger J. O'Brien, Development Administrator  
Town of Hamden

Mr. Anthony Panaco, Planning Consultant  
Town of Branford

Mr. Wade E. Pierce, City Planner  
Milford Planning and Zoning Commission

Ms. Sandra Ranciato, Planner  
Town of North Haven

Mr. John Sawyer, Development Administrator  
City of New Haven

Mr. Marton Wittstein, Director  
Economic Development Commission, Town of North Haven

Mr. Carl Zinn  
H. Pearce Realtors, North Haven

NORTH HAVEN MALL ENVIRONMENTAL ASSESSMENT  
ALTERNATIVES TO PROVISION OF THE PROPOSED RETAIL SERVICE FACILITIES

ATTACHMENT B

SCREENING CRITERIA DATA FOR CANDIDATE SITE ALTERNATIVES

- (1) BAILEY ROAD, NORTH HAVEN  
I-91, Exit 10 (63 acres)

Overriding Problems

Access - No access from Bailey Road to I-91. Interchange is actually with Route 40 connector, another limited access facility. Circuitous route through local streets would be required to reach the site.

Land Use Compatibility - Parcel lies within a heavy industrial area. Such uses are not compatible with shopping centers.

Legal and Political Constraints (Status) - In the past, several commercial developers considered this site, but lack of good highway access precluded development. Site is now being developed as an industrial park.

### Serious Constraints

Land Use Constraints - Site is zoned for heavy industry (IG-80) and therefore a zoning change would be required.

Market Coverage or Site Location - The site is centrally located in market area.

Infrastructure - Site is serviced by sanitary sewer and water is available.

### Other Constraints

Flooding - Flooding may be a problem as the site is designated as a Flood Hazard Zone.

Water Quality - Location in Coastal Zone Management Area, and in tidal wetlands, indicates that problems with water quality may occur.

Air and Noise Quality - There may be problems depending upon what local access would be provided to the site.

Historic and Archaeological Site Potential - No extraordinary problems are apparent at this site.

Local Road Improvements - Road improvements necessary in light of incomplete access from I-91.

(2) **TERMINAL ROAD, NORTH HAVEN**

I-91, Exit 9 (129 acres)

Overriding Problems

Access - There is no direct access to site from I-91. In order to provide such access, a bridge would have to be constructed over existing railroad tracks. To reach the site, traffic presently has to travel through the local street network, which is inadequate to meet shopping center traffic.

Land Use Compatibility - Site is surrounded by heavy industry, including a chemical plant, the town sewer treatment facility and the town solid waste disposal site. All these areas are incompatible with a regional shopping center.

Legal & Political Constraints (Status) - While commercial developers have looked at this site in the past, the heavy industry surrounding the site precluded development as a shopping center. Site is currently under contract by a developer for the construction of an industrial park.

Serious Constraints

Land Use Constraints - Site is zoned for heavy industry (IG 80) and therefore a zoning change would be required.

Market Coverage - Site is centrally located in market area. Acreage appears to be adequate to accommodate proposed scale of retail development but the amount of developable land at the site is not known.

Infrastructure - Site is located close to the town's sewer treatment plant. However, in order to provide sewer service to the site, a trunk line sewer extension approximately 1/2 mile in length would need to be constructed.

Other Constraints

Flooding - Flooding is likely to be a problem as the site is designated as a Flood Hazard Zone.

Water Quality - Location in a Coastal Zone Management Area and in tidal wetlands indicates that problems with water quality may occur.

Air and Noise Quality - Since access to the site can only be provided through local residential streets, air and noise problems may arise.

Historic and Archaeological Site Potential - No extraordinary problems are apparent at this site.

Local Road Improvements - Roads would probably require extensive widening and improvements in order to accommodate mall-related traffic since no direct access from or to I-91 is provided.



(3) 788-798 EAST MAIN STREET

Branford (U.S. 1)

I-95, Exit 56 (30 acres)

Overriding Problems

Access - Site is located close to I-95 interchange. No major access problems observed.

Land Use Compatibility - Site is located in area zoned for general industrial uses. However, except for a few homes, there is little development there. No major land use conflicts observed. Is adjacent to truck stop located on I-95.

Legal and Political Constraints (Status). Recently there was a serious unsuccessful proposal on the part of a developer (not Mall Properties) to develop the site as a shopping center. This property had been zoned for industrial use, a zoning classification that would not allow development of a regional shopping center.

In the summer of 1979 a proposal was made to the Branford Planning and Zoning Commission for a change in zoning of 200 acres, incorporating several parcels, to a "special development area." This zoning category would allow shopping center development although further approvals would be required before such a project could be built. Specifically, following approval of the zoning change, the developer would have to apply for

establishment of a "planned development district" and submit site plans, traffic studies and other materials to the Commission for approval.

On July 29, 1979 the Planning and Zoning Commission approved the rezoning of 30 acres, of the 200 acres requested, as a "special development area". This is not enough land for construction of a major regional shopping center. After this determination, the project's developer no longer pursued possible development of a regional shopping mall at this site. No application for establishment of a "planned development district" at this site was ever made to the Commission. Presently there is no proposal before the Planning and Zoning Commission for a shopping center at this site and, according to planning officials, no active interest in this project.

#### Serious Constraints

Land Use Constraints - While the site is zoned for general industrial uses, a small part of it is in a "special development area" which would allow for a shopping center.

Site Size - Site is not large enough to accommodate the proposed 1.12 million square feet of retail space. If the entire site could be developed, less than 500,000 square feet of retail space might be feasible at this location.

Market Coverage - Site is located in the eastern section of the market area. Market area for a mall at this location would include: Branford,

North Branford, Guilford, Madison, Clinton, Killingworth, East Haven, New Haven, West Haven, North Haven and Hamden. It would not serve several towns within the defined market area of the present proposal: Orange, Woodbridge, Bethany, Cheshire, Wallingford, Durham, Middlefield, and Meriden.

Infrastructure - Currently there is no sewer service to the site but it is close to trunk line sewers. There should be no problems, therefore, in connecting to the town sewer system. The town is presently in the process of constructing an expansion to sewer treatment plants, so treatment capacity is not a problem. Water supply may be a problem at this site. The New Haven Water Supply Company mains stop at the border of the property. Further investigation of this problem would be required.

Other Constraints

Flooding - No apparent problems.

Water Quality - No apparent problem.

Air and Noise Quality - No apparent problem.

Historical and Archaeological Site Potential - No extraordinary problems are apparent at this site.

Local Road Improvements - Some may be needed on local road connector from I-95 to site, as well as along East Main St. (U.S. 1).

(4) BRANFORD

I-95, Exit 53 (55 acres)

Overriding Problems

Access - Interchange with I-95 is only one-way, in the westerly direction; eastern access is not provided.

Land Use Compatibility - Since initial interest was shown in this site as a shopping center location, other non-retail development has taken place. A good portion of this site is currently in use as either a distribution center or a state owned park and ride facility, leaving an insufficient amount of land as well as an awkward land configuration for a regional shopping center.

Legal & Political Constraints (Status) - Site was the location of a now defunct small shopping center and bowling alley. Closing of center indicates poor location for major retail use.

Serious Constraints

Land Use Constraints - Site is currently zoned as a local business district.

Site Size - Site is not large enough to accommodate the proposed 1.12 million square feet of retail space. If the entire site could be developed, approximately 700,000 square feet of retail space might be

feasible. However, much of the site is currently in use for other purposes.

Market Coverage - Located in the eastern section of the market area.

The market area for a mall at this location would include: Branford, North Branford, Guilford, Madison, Clinton, Killingworth, East Haven, New Haven, West Haven, North Haven and Hamden. It would not serve several towns within the defined market area of the present proposal, including: Orange, Woodbridge, Bethany, Cheshire, Wallingford, Durham, Middlefield, and Meriden.

Infrastructure - Site has sewer and water service. Town is currently expanding sewerage treatment plant from 1-1/2 MGD to 5 MGD. Expansion should be completed within 2-3 years.

Other Constraints

Flooding - No apparent problem.

Water Quality - No apparent problem.

Air and Noise Quality - Since full access is not provided from and to I-95, use of local streets for mall related traffic may engender air and noise problems, especially along local streets.

Historic and Archaeological Site Potential - No extraordinary problems are apparent at this site.

Local Road Improvements - Some would probably be needed since most mall-related traffic would have to travel through local streets.

(5) EVERGREEN AVENUE OFF DIXWELL AVE.

Hamden (112 acres)

Overrriding Problems

Access - The site is located some distance from a major limited access road. Access to the site would be primarily through Dixwell Ave., a heavily used and currently congested major arterial. (See "Congestion and Air Quality, Carbon Monoxide at Intersections," Regional Planning Agency of South Central Connecticut, April 1980.)

Land Use Compatibility - Although zoned appropriately, shopping center activity would be incompatible with the residential subdivisions surrounding this site. The level of retail activity associated with a regional retail center would be in conflict with the community uses surrounding the site.

Legal & Political Constraints (Status) - In the early 1970s a major department store attempted to locate on the site but was prevented due to local opposition. There is no longer any active interest in development of this site as a shopping mall.

### Serious Constraints

Land Use Constraints - Existing zoning would allow for shopping center use.

Market Coverage - The site is centrally located in the market area. Difficult access and poor "visibility" of the site present serious marketing problems and have been previously recognized by major retailers.

Infrastructure - Sewer and water service is supplied.

### Other Constraints

Flooding - Runoff problems may occur once undeveloped site is paved.

Water Quality - Due to possible runoff and wetland areas, water quality may be a problem.

Air and Noise Quality - There are likely to be air and noise problems due to traffic using local streets as well as site's proximity to residential areas.

Historic and Archaeological Site Potential - No extraordinary problems are apparent at this site.

Local Road Improvements - Major road improvements will be needed since access is through Dixwell Ave., a street which currently experiences congestion problems.

(6) PUTMAN AND MORSE STS.

off Dixwell Ave. (former airport site)

Hamden (44 acres)

Overriding Problems

Access - This site is located 2 miles from a major limited-access road. Access to the site would be primarily through Dixwell Avenue, a heavily used and currently congested major arterial, and Putnam Avenue, a local street. (See "Congestion and Air Quality, Carbon Monoxide at Intersections," Regional Planning Agency of South Central Connecticut, April 1980.)

Land Use Compatibility - Shopping activity would be incompatible with residential land uses surrounding site. The level of retail activity associated with a regional retail center would be in conflict with community uses surrounding the site.

Legal & Political Constraints (Status) - A bonding issue needed to develop a proposed industrial park on this site was previously turned down by the Town council.



### Serious Constraints

Land Use Constraints - Existing zoning would allow for shopping center use.

Site Size - This site is not large enough to accommodate 1.12 million square feet of retail space. Assuming that the entire site were developable, it could accommodate, at most, 600,000 square feet of retail space.

Market Coverage - The site is centrally located in the market area. Difficult access and poor "visibility" of the site would present serious marketing problems.

Infrastructure - Sewer and water service is supplied.

### Other Constraints

Flooding - No apparent problem.

Water Quality - No apparent problem.

Air and Noise Quality - There are likely to be air and noise problems due to traffic generated on local streets as well as site's proximity to residential areas.

Historic and Archaeological Site Potential - No extraordinary problems are apparent at this site.

Local Road Improvements - Major road improvements would be necessary as access is via Dixwell Avenue, a heavily used and currently congested major arterial. Also Putnam and Morse Streets would require extensive expansion and signaling improvements.

(7) MARSH HILL ROAD

I-95 Exit 41, Orange (65 acres)

Overriding Problems

Access - The site is adjacent to I-95 and close to the interchange.

Land Use Compatibility - The site is located in the midst of an area which is mostly undeveloped and therefore no incompatibility with surrounding land uses is apparent. The general area is zoned for industrial use.

Legal & Political Constraints (Status) - A developer is currently working on developing the site. Lack of adequate sewerage facilities seems to be the delaying factor. Also, some residents of Indian Lake community are opposed to development of this location.

Serious Constraints

Land Use Constraints - The site is currently zoned "light industrial", but will allow a regional shopping center. This site has adequate acreage to support a regional retail center.

Site Size - The site size is deemed sufficient for a regional retail facility.

Market Coverage - Located in the western section of the market area for the proposed North Haven Mall. The market area for a mall on this site would likely include towns to the west of and outside of the North Haven market area as well as several towns in the market area, including: Orange, West Haven, East Haven, Woodbridge, Hamden, Bethany, and North Haven. Towns in the North Haven Mall's market area which would not be well served by a retail facility on this site include Wallingford, Branford, North Branford, Guilford, Madison, Cheshire, Durham, Middlefield, and Meriden.

Infrastructure - With minor exceptions, the entire town is currently using septic tanks. There is currently litigation with the town of West Haven over allowing Orange to tie into West Haven's sewer system. Since Orange town ordinances require that any shopping center be sewered, the developer may have the option of either coming to private agreement with West Haven or constructing a small package sewer treatment plant for the proposed mall.

Other Constraints

Flooding - No apparent problem.

Water Quality - Some concern that there may be impact on Oyster River due to erosion and sedimentation problem resulting from site development.

Air and Noise Quality - No apparent problem.

Historic and Archaeological Site Potential - No extraordinary problems are apparent at this site.

Local Road Improvements - Marsh Hill Road is currently a two-lane local street. On Saturday evenings, traffic generated by nearby cinemas causes severe traffic congestion. A major shopping center would require significant upgrading and widening of this road.

(8) LAMBERT ROAD

Indian River Road, Orange

I-95, Exit 41 (30-40 acres)

Overriding Problems

Access - Site is adjacent to I-95 and close to the interchange. Access would, therefore, be suitable.

Land Use Compatibility - Site is located near Indian Lake residential area and shopping center activity would not be compatible with the character of area.

Legal & Political Constraints (Status) - Some residents of the adjacent Indian Lake community have opposed development of this site.

### Serious Constraints

Land Use Constraints - Zoning allows for shopping center use. Site is neither wetland nor in a coastal zone.

Site Size - This site is not large enough to accommodate 1.12 million square feet of retail space. Assuming that the entire site could be developed, it could accommodate, at most, approximately a 500,000 square foot shopping center.

Market Coverage - Located in the western section of the market area for the proposed North Haven Mall. Market area for a mall on this site would likely include towns to the west of and outside of the North Haven Mall's market area as well as several towns in the market area, including: Orange, West Haven, East Haven, Woodbridge, Hamden, Bethany, and North Haven. Towns in the North Haven Mall's market area which would not be served by a retail facility on this site include: Wallingford, Branford, North Branford, Guilford, Madison, Cheshire, Durham, Middlefield and Meriden.

Infrastructure - With minor exceptions, the entire town is currently using septic tanks. There is current litigation with the town of West Haven over allowing Orange to tie into West Haven's sewer system. Since Orange town ordinances require that any shopping center be sewered, the developer may have the option of either entering into a private agreement with West Haven or constructing a small package sewage treatment plant for use of the proposed development.

Other Constraints

Flooding - No apparent problem.

Water Quality - No apparent problem.

Air and Noise Quality - Traffic use of local streets, particularly Indian River Road, to reach the site may cause air and noise problems to Indian Lake community.

Local Road Improvements - Lambert Road and Indian River Road would both need to be upgraded and widened in order to service mall-related traffic.

(9) POMEROY AVE. AND E. MAIN STREET

Meriden (100 acres)

Overriding Problems

Access - Site is located adjacent to I-91 about 1/4 of a mile from I-91 interchange so accessibility is not likely to be a problem.

Land Use Compatibility - The area surrounding the site presently has some homes (which are non-conforming uses), industrial development, and some commercial activity. Therefore, no conflict with surrounding land uses is foreseen.

Legal and Political Constraints (Status) - The Meriden Inland Wetlands Commission granted a permit for development of this site in January, 1975. Subsequent to issuance of this wetlands permit, the owners of contiguous property won a civil suit concerning riparian rights against a proposed development at this site. The suit involved a watercourse on the abutting center. The Inland Wetlands Commission reversed its initial decision after this court ruling and denied the wetlands permit at this site. Another more recent proposal for a shopping center development at this site was precluded due to the same water rights problem. There is currently no active interest in any major shopping center development project at this site.

#### Serious Constraints

Land Use Constraints - Zoning would allow for shopping center use. The site is on wetland and a wetland permit would be required.

Market Coverage - Site is on the northern edge of the market area and as such would not serve the same primary market area as the North Haven site. In addition, the town is already served by a major shopping center which would pose competitive problems for any new development. Towns in the North Haven Mall market area which would be served by retail facility in this location would probably include only Meriden, Middlefield, Durham Wallingford, and Cheshire. A very significant portion of the market area of the proposed mall would therefore be unserved.

Infrastructure - Town is currently in process of expanding sewage treatment facility so no sewer service problems are anticipated in the short-run. The town's water distribution system, however, requires extensive repair. Repairs are being done using local funds and hence are proceeding steadily but not rapidly.

Other Constraints

Flooding - Its wetlands status may imply that flooding problems may ensue from site development.

Water Quality - Since the site involves wetland, water quality problems may be present.

Air and Noise Quality - No apparent problem.

Historic and Archaeological Site Potential - No extraordinary problems are apparent at this site.

Local Road Improvements - Extensive signaling and upgrading improvements would be required on Pomeroy Ave. and E. Main St. and widening of these streets may prove difficult.



(10) CONNECTICUT POST EXPANSION

Boston Post Road (U.S. 1) , Milford (75 acres)

Overriding Problems

Access - Is close to exit on I-95 and adjacent to U.S. 1 so no accessibility problems are foreseen.

Land Use Compatibility - Site is expansion of existing facility and is surrounded by either commercial uses or open space. No land use conflicts are anticipated.

Legal & Political Constraints (Status). Site is owned by the Rouse Co. which is actively pursuing refurbishment of retail facilities. Improvements being made at the present time include changes in tenants, enclosure of mall facilities and the addition of 20,000 square feet of leasable space through rearrangement of the floor space in existing structures. Approvals required for the enclosure were obtained previously and work on this improvement is expected to begin soon. Although tenant changes require amendments to the center's zoning permit, such changes are normally granted by the Planning and Zoning Commission.

Although the Town of Milford has a sewer moratorium, existing permits allow the Mall to rent all existing space. Also, since existing parking facilities exceed requirements, no new air or traffic permits are required for improvements to the existing facilities.

However, the addition of any new structures to the Connecticut Post Center would require amendments to its current zoning and traffic permits. No applications have been made to the Planning and Zoning Commission for any additional structures at the Connecticut Post Center.

Site Size - The size of the site available for expansion is deemed sufficient for a regional retail facility.

#### Serious Constraints

Land Use Constraints - Site would represent expansion of existing center and is zoned accordingly. This site has adequate acreage to support a regional retail center.

Market Coverage - The retail facility is located to the southwest and outside of the North Haven Mall market area. An expanded facility at this location would be likely to draw primarily from cities and towns to the immediate east of Milford as well and to the areas west and northwest. Towns in the eastern and northern section of North Haven's market area would not be served, including: Wallingford, Branford, North Branford, Guilford, Madison, Cheshire, Durham, Middlefield and Meriden. In addition, the Town of North Haven would not be well served by a shopping center located in Milford.

Infrastructure - The town sewerage treatment plant has no additional capacity. While an Environmental Impact Statement on the proposed treatment facility has been approved, the town is awaiting federal funding,

bond approval, and land condemnation before proceeding with expansion plans.

#### Other Constraints

Flooding - There is currently no problem but proximity to the Indian River would warrant investigation of potential flooding problems.

Water Quality - There are no current water quality problems but proximity to the Indian River would warrant investigation of potential water quality impacts.

Air and Noise Quality - Traffic would be increased in U.S. 1, a heavily used major artery. Traffic increases on an already congested road may cause air and noise quality problems.

Historical and Archaeological Site Potential - No extraordinary problems are apparent at this site.

Local Road Improvements - For any major addition of space, road improvements would be required in U.S. 1, a major artery which already experiences some traffic congestion problems.

(11) MILFORD PARKWAY AND WILBUR CROSS PARKWAY

Milford (100 acres)

Overrriding Problems

Access - Although site is adjacent to two parkways it has access to neither. A preliminary design to construct an interchange linking the site to the Milford Parkway was rejected by Conn. D.O.T. An application for traffic certification for this project, which includes proposed plans for an interchange to the Milford Parkway, is currently pending before the State Traffic Commission.

Land Use Compatibility - Most of the land surrounding the site is currently undeveloped, so no land use conflicts are foreseen.

Legal & Political Constraints (Status) - The developer has withdrawn his application to the Town for a zoning change to permit development of the site. The town expects the application to be resubmitted upon the resolution of the interchange problem.

Serious Constraints

Land Use Constraints. This site has adequate acreage to support a regional retail center. Property is zoned for low density residential use. A recent request for a zoning change was rejected, and the project's developer reapplied and withdrew his second application. No application for a change of zoning for this site is currently before the

Planning and Zoning Commission. In addition to the change in zoning, a special permit approval from the Milford Planning and Zoning Commission would be required before a regional shopping center could be constructed at this site. No application for such a permit has been made to the Commission.

Site Size - The size of the site is deemed sufficient for a regional retail facility.

Market Coverage - Located in the southwest section of the North Haven Mall market area. A facility at this location would be likely to draw primarily from cities and towns to the immediate east of Milford as well and to the areas west and northeast. Towns in the eastern and northern section of North Haven's market area would not be served. In addition, the town of North Haven would not be well served by a shopping center located in Milford.

Infrastructure - The town sewerage treatment plant has no additional capacity. While an Environmental Impact statement on the proposed treatment facility has been approved, the town is awaiting federal funding, bond approval, and land condemnation before it can proceed with expansion plans.

### Other Constraints

Flooding - No apparent problem.

Water Quality - The original site plans submitted by the developer called for construction of a sediment retention basin. There may be water quality problems associated with development of the site.

Air and Noise Quality - No apparent problem.

Historic and Archaeological Site Potential - No extraordinary problems are apparent at this site.

Local Road Improvements - Some upgrading of Oronoque Rd. would be necessary to provide truck access to the site as no trucks are permitted on either parkway. Other than this road, there are no local streets serving the site and shopper access would have to be provided via a parkway interchange.

#### (12) "MAGIC MILE" EXPANSION

Dixwell Ave., Hamden (65 acres)

### Overriding Problems

Access - Although site is located on Dixwell Ave., a heavily used and currently congested major artery, it is located in proximity to a Wilbur Cross Parkway interchange.

Land Use Compatibility - Site is currently used as the parking lot of an existing shopping center. No incompatibility with surrounding land uses is apparent.

Serious Constraints

Legal & Political Constraints (Status) - The owners of the sites have previously rejected proposals for the possible erection of a parking garage and an expansion of existing retail facilities. (See the following paragraph for further details.)

Land Use Constraints - The existing Hamden Commercial area along the west side of Dixwell Avenue, from the High School on the south to Skiff Street on the north and west to the Apartment complexes, was the area suggested for expansion by the Town. The suggestion, never formalized, was to eliminate, in stages, the existing facilities and replace them with a platform of 1 to 1-1/2 stories in height upon which 1 to 2 story stores will be built. The platform would, under existing zoning, be approximately 1.3 million square feet in area. Parking under the platform would meet the needs of existing zoning requirements. This proposal, according to the Town, was rejected by the owners of the two existing Malls.

Market Coverage - The site is centrally located in the market area. However, Hamden is somewhat further to the west than North Haven and does not have equally good access to I-95. Therefore, it would likely not serve certain towns in the eastern portion of the North Haven Mall's

market area, including Meriden, Middlefield, Durham, Madison, Guilford and Branford.

Infrastructure - Sewer and water service is supplied.

Other Constraints

Flooding - No apparent problem.

Water Quality - No apparent problem.

Air and Noise Quality - There may be air and noise problems due to center generated traffic exacerbating traffic congestion and concentration on Dixwell Avenue. Several intersections serving the Dixwell Avenue retail centers have been cited among the most serious air quality problem areas in the region at the present time. (See "Congestion and Air Quality, Carbon Monoxide at Intersections," Regional Planning Agency of South Central Connecticut, April 1980.)

Historic and Archaeological Site Potential - No extraordinary problems are apparent at this site.

Local Road Improvements - Improvements to Dixwell Ave. would probably be required since this road is currently congested.



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**APPENDIX R**  
Community Impact Study

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# **NORTH HAVEN MALL**

**NORTH HAVEN, CONNECTICUT**



1981



**US Army Corps  
of Engineers**  
New England Division

## Appendix R

### Community Impact Study

The material contained in this appendix was prepared by Rivkin Associates for the Department of Housing and Urban Development under the Community Conservation Guidelines policy instituted under President Carter (this policy has been rescinded under President Reagan). It was provided to the Corps of Engineers as information in support of application #13-79-561 for a permit under Section 404 of the Clean Water Act of 1977, and Section 10 of the River and Harbor Act of 1899.

COMMUNITY IMPACT STUDY  
Proposed Issuance of Corps of Engineers  
Permit for Filling in Areas  
Related to the Quinnipiac River  
and Development of North Haven Mall  
North Haven, Connecticut

Planning and Research  
for Urban Development  
**Rivkin Associates Inc.**  
2900 M Street Northwest  
Washington DC 20007  
Telephone (202) 337-3100

### Prefatory Note

The purpose of this Community Impact Study is to depict on the basis of interviews and available statistical and analytical materials, the nature of the impacts of North Haven Mall on surrounding established communities. There are a number of studies currently under way which will deal in the matters of concern here in far more detail than has been possible during this assignment. One of these is an analysis by the Regional Planning Agency of South Central Connecticut. Another is the full environmental impact statement on the North Haven Mall (lead agency: U.S. Army Corps of Engineers, New England Division) which will be completed in early 1981. This present study, prepared without benefit of the research and findings of the more detailed, contemporaneous work, is a preliminary assessment.

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

WASHINGTON, D.C. 20410

OFFICE OF THE ASSISTANT SECRETARY  
FOR COMMUNITY PLANNING AND DEVELOPMENT

IN REPLY REFER TO:

The following community impact study on the North Haven Mall was initiated within the broad discretionary authority of the Federal Government in carrying forth President Carter's mandate to make Federal activity efficient, equitable and responsive. As it relates to the President's Urban Policy, the study is aimed at assuring Federal actions which are consistent at the local level and which do not undermine the existing resources of one community at the undue benefit of another. The study was also initiated at the specific request of the U. S. Corps of Engineers in accordance with the memorandum of understanding between HUD and the Corps. Finally, HUD commissioned Rivkin Associates, Inc. to prepare the study under the President's Community Conservation Guidance policy in response to the needs as expressed by the Mayor of New Haven, Connecticut.

The study is based on statistical and analytical material available as of April 1980 as well as discussions held with cooperating key interests. In assessing the nature of the impacts of the North Haven Mall on nearby surrounding established communities, especially New Haven, the study provides findings which, while they can and should be refined in light of more comprehensive studies now underway, are specific enough to generate relevant discussions among any public and private groups concerning the effect of the mall on the area, and the appropriateness of pending Federal actions.

## I. SUMMARY OF FINDINGS AND CONCLUSIONS

### A. Federal Actions Under Consideration Could Lead to Development of a Super-Regional Shopping Center in South Central Connecticut.

This study has been undertaken under the White House Community Conservation Guidelines of 1979. It was initiated by the Department of Housing and Urban Development on request by Mayor Biagio DiLieto of New Haven, Connecticut. The charge is to examine whether a proposed shopping mall in North Haven, Connecticut, and Federal actions on which it is contingent contribute to or detract from, urban development objectives for New Haven and surrounding communities that are important to the Federal Government.

The major Federal action at issue entails a Corps of Engineers permit under Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act for the placing of fill material in wetlands and backwater areas adjacent to the Quinnipiac River. In addition, other less direct Federal actions include a commitment of Federal Aid Urban Systems funds for access highway improvements and the expansion of North Haven's sewerage system and treatment plant capacity. The Corps of Engineers is the lead agency for a full environmental impact statement on the project. Completion of the EIS is scheduled for early 1981. Under the Interagency Memorandum of Agreement between the Corps and HUD, the Corps has requested HUD's participation in the EIS process. This study does not preclude further contributions by HUD.

The proposed mall is a 1.2 million square foot project that includes four major department stores, smaller shops, a theatre, 5600 parking spaces and a stormwater holding pond. The 117 acre site is located between the Wilbur Cross Parkway (Route 15) and Interstate 91, the parallel expressways that link New Haven and Hartford and serve as the main north-south transportation spine for the region.

A number of permits and approvals need to be secured before mall construction could begin. The mall's opening could, consequently, be delayed beyond the developer's schedule -- perhaps as late as 1985. Achieving full operations could take even longer.

### B. The Region: Very Slow-Growth Prospects, Internal Population Shifts and a Distressed Central City.

This location of the proposed mall is about the geographical center of the South Central Connecticut Region, a 383 square mile area where the State estimates 1980 population at 534,000. The "region" contains three central cities: New Haven (130,000 population), Meriden (57,300) and Milford (50,900) plus 13 other cities and towns. It covers the New Haven and Meriden SMSA's and the easternmost community of the Bridgeport SMSA (Milford).



Although the region has been in a virtual "no-growth" state (3.1 percent increase) over the past decade and is projected to continue in the same way (1990 population of 547,000) there have been significant intra-regional shifts of population. Long term losses in New Haven, and relative stability in the two smaller central cities have been balanced by growth in the suburbs ranging from very little to as high as 40 percent or more. By the end of the coming decade, according to the State's recent projections, New Haven will have somewhat under 25 percent of the region's population. New Haven plus the adjacent communities at the heart of the region that comprise the primary trade area of the central city will have 52 percent of the region's population. A secondary trade area will hold 22+ percent of the population and a tertiary area will have 25+ percent.

Income trends have only slightly exceeded the 1970-77 rate of inflation with growing disparity between New Haven and the outlying suburbs. Employment has been growing only very slowly. Projected increases in jobs, 1980-1985, in the New Haven SMSA average less than one percent annually. The services sector is dominant in the regional economy, especially so in New Haven. Retail trade accounts for a significant 16 percent share of regional employment (13 percent in the City of New Haven).

C. Dispersed Retail Patterns, Aging Suburban Facilities and a Well-Served Market.

In 1977 population of the region was 521,700. Gross income was \$3,062.9 million. Retail sales in the merchandise categories most heavily represented in department stores and shopping centers (variously referred to as shopping goods, comparison shopping goods, DSTM -- department store type merchandise, or GAF -- general merchandise, apparel and accessories, furniture and home furnishings and miscellaneous shopping goods) were \$465,870,000, or 15.2 percent of gross income. Sales in restaurants, bars and drugstores were \$218,620,000 or 7.2 percent of gross income. On a per capita basis, these sales volumes work out to be \$910 and \$540, respectively, which exceed average values for the State of Connecticut.

Within the region the primary trade area (New Haven City, West Haven City, East Haven, North Haven and Hamden) had somewhat under 50 percent of the shopping goods sales and 57 percent of the restaurant, bar, and drugstore sales, as compared with 52 percent of the region's population and 51 percent of the region's gross income. Major retail centers within this market subarea are: Downtown New Haven, the largest concentration of retail activity in the region with about 1.2 million square feet, two major department stores and \$78.5 million in comparison goods sales in 1977 (17 percent of the region's total sales in these categories); and Hamden Plaza-Hamden Mart Extended plus additional establishments in Hamden's Dixwell Avenue shopping strip, with about 950,000 square feet, including a major Sears Roebuck, junior or discount department stores, women's specialty firms and large convenience goods outlets. The Hamden complex did 11.1 percent of the region's shopping goods trade in 1977, or \$51.6 million.

The secondary trade area offers no shopping center facilities of substantial scale. These communities, consequently, captured only 11.5 percent of the region's shopping goods trade as compared with their combined 22 percent of the population and 23 percent of gross income. Much of this went to the Town of Wallingford.

In the tertiary area, however, sales were well in excess of the shares of population and income: 37 percent, in contrast with 26 and 28 percent, respectively. Major retail centers in this market sector are in Meriden -- primarily Meriden Square with two "anchor" department stores, J.C. Penney and G. Fox, and nearby stores along Lewis Avenue which altogether accounted for 500,000 to 600,000 square feet and \$37.758 million in shopping goods business in 1977; and Milford's Connecticut Post Mall an 800,000 square foot facility with Alexander's as its single major department store. Central business districts in Meriden and Milford are dominated by these shopping centers, each capturing shopping goods sales on the order of \$5-6 million in 1977.

Most of these suburban facilities represent the first generation of suburban shopping centers built in the 1950s and 1960s. They are characterized by one or two conventional department stores as major magnet or "anchor" tenants, a relatively strong share of convenience goods firms in their tenant mix and incipient signs of wear and obsolescence. A program has been publicized for upgrading and expansion of the retail facilities in downtown New Haven (which would add 300,000 square feet including one department store). Plans for Connecticut Post Mall (which would add 200,000 square feet including a new department store) have also been described. This center and nearby stores did \$17.7 million DSTM business in 1977.

D. Prospects that the Proposed North Haven Mall would be Successful at the Expense of Diverting Trade and Tenants from Existing Facilities.

Given the extremely slow growth projected for the South Central Connecticut Region as a whole, the likelihood that, at best, growth in the regional economy will enable gross income to keep pace with inflation, and the assumption that shopping goods purchases (which are the chief concern in retail center development) will continue to capture the share of income within the region that they held in 1977, the 1985-90 sales picture shows very little increase in business over 1977 levels -- 3.3 percent by 1985 and 4.7 percent by 1990.

The proposed North Haven Mall project is very well located in relation to the geographical distribution of population and incomes in the South Central Connecticut Region. This, plus its scale and unique tenant composition should enable it to attract a sufficient share of the regional market to ensure success.

Success of the new mall could occur, however, only at the expense of existing retail developments elsewhere in the region. For the limited growth prospects for retailing in the region are insufficient to support the proposed new mall and existing retail developments as well.

### E. Benefits of the Proposed North Haven Mall

If the project is built, benefits would accrue to its developers and builders in the form of profits, to its tenants in the form of high volumes of customer traffic, to its customers in some savings of fuel and time because of the wide range of merchandise and services assembled in a single place, to its employees through their jobs and to the Town of North Haven in increased revenue base and tax income as well as the possibility of induced secondary growth impacts.

There are no significant potential contributions to the following Federal urban development objectives: furthering economic revitalization of distressed communities, especially central cities; stabilizing older, established suburban communities (except for North Haven); expanding job opportunities for minorities and the unemployed concentrated in distressed communities; expanding housing choices for the disadvantaged and minorities; strengthening the fiscal condition and tax base of distressed communities; conserving and revitalizing neighborhoods; improving urban physical, cultural and aesthetic environments or fostering improved service and increased ridership of mass transit (except possibly for North Haven).

Since all the principal tenants in the new mall are already represented within the region there is little likelihood that the facility will add to the price range and variety of merchandise available to the area's consumers.

### F. Adverse Impacts of the Proposed New Mall

While the incidence of benefits that would flow from the proposed mall development are somewhat limited as indicated above, the adverse impacts can be expected to be more widespread: commercial developments elsewhere throughout the region, in communities where existing retail facilities are located will sustain the most substantial losses of trade, tenants and future investment potential. These would include Hamden, Meriden, Wallingford, Milford to some extent and, of course, downtown New Haven. Loss of economic activity in these places could lead eventually to physical blight and difficulty over time in sustaining the costs of community services. This in turn, would likely lead to further community decline.

Efforts to revitalize the central city's downtown and neighborhood commercial districts would be inhibited as would efforts of some of the older suburban areas to upgrade their main street shopping districts. These would include East Haven, West Haven, Wallingford and Hamden.

Some archeological resources may be destroyed by the mall construction.

Both developed and undeveloped areas downstream of the proposed Mall in the Quinnipiac River Valley may be subjected to increased risk of flooding. The EIS should carefully explore these concerns.

There would be increased traffic congestion in the vicinity of the mall, if built as proposed, although with improvements to the highway network as sought from the developer by the Connecticut Department of Transportation, these impacts could be mitigated.

Downstream commercial oyster beds may be threatened by increased siltation associated with more frequent and severe flooding as noted by officials from Connecticut's Department of Environmental Protection and Department of Agriculture.

Efforts to improve mass transit and arrest inner city decline could be frustrated by realization of the proposed mall development. Massive public investments -- Federal, state, and local -- and private investment they have encouraged in the central city revitalization, would be undermined.

#### G. Mitigation Possibilities are Limited.

It would be difficult to mitigate the possible adverse economic effects of the proposed North Haven Mall at its present scale, since such effects would be widespread. This is especially pertinent in light of the general lack of economic growth in prospect for the region which poses a significant constraint.

#### H. There Are Alternatives, Although Not Precisely Equivalent.

There are feasible, although not precisely equivalent, alternatives to the proposed new shopping center for improving service to the region's retail consumers. These alternatives are more consistent with Federal and State policy concerning conservation and enhancement of established communities and their business districts. The alternatives involve upgrading older shopping centers and commercial districts and improving access to them and possibly scaling back the proposed North Haven Mall.

#### I. Recommendations to the Federal Government.

In view of the preliminary, generalized nature of the materials available in the course of this study, we recommend that HUD monitor the output of the environmental impact statement process over the coming eight to ten months.

On the basis of emerging information this assessment should be reevaluated.

Should the findings and conclusions remain unchanged with subsequent analysis, then we would recommend that the Corps of Engineers fill permit be denied to the Mall project at its currently proposed scale on the basis that, at its currently proposed scale, the North Haven Mall development could bring undue adverse damage to the established commercial areas in the region and in particular to the City of New Haven. This adverse impact appears to outweigh the benefits of the proposed mall for North Haven and the region.

## II. Background and Purpose of Study

Under provisions of the White House Community Conservation Guidance document, Mayor Biagio DiLieto, of New Haven, Connecticut, has asked the Federal Government for a community impact analysis of a Corps of Engineers permit under Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act for the placing of fill material in backwater areas of, and wetlands adjacent to, the Quinnipiac River in North Haven, Connecticut. Application for the permit has been made by the prospective developer of a shopping center of approximately one million square feet on this site. The mayor believes that development of the shopping mall could have serious impacts on existing retail and related economic activities in New Haven, Hamden, Meriden and other nearby communities.

### A. The Community Conservation Guidelines

Procedures for such a request were spelled out in early December 1979. They are part of an effort to implement President Carter's "urban policy", "energy policy", and the principle of "targeting" Federal assistance to areas and groups of people most in need.

The Community Conservation Guidelines reflect a long-standing Federal commitment to revitalize older, distressed urban areas, particularly their established business districts. Substantial amounts of Federal aid have already been directed toward improving conditions in struggling downtowns and commercial centers. Over the years this aid has taken many forms, from redevelopment subsidies to construction of basic infrastructure, public transit, parking and traffic flow improvements, rehabilitation and business loans and training programs.

Today community conservation is the emphasis of Federal policy. This means making the various forms of assistance easier for communities to use as they see fit, especially for projects that help states and local jurisdictions encourage private investment in the target commercial areas. It also means avoiding Federal actions that undermine the effectiveness of public investments in urban upgrading; and it includes a firm determination to prevent new deterioration that would put additional local jurisdictions on the list of troubled areas.

Toward these ends the Community Conservation Guidance offers a means of early warning about Federal actions or funding that could damage existing communities by significantly aiding large-scale new commercial development inside or outside their respective jurisdictional boundaries. An alert can be sounded by the chief elected official of a community that perceives itself threatened. The Federal response is to investigate the circumstances, with the assurance that the findings will be considered in final agency decisions on the Federal actions in question.

#### Scope of the Community Impact Analysis

Erosion of the established community's tax base is one critical form of damage envisioned under the guidelines. Another is loss of job opportunities--for the community overall, or for minority members of the labor force. Increased use of energy resulting from inefficient patterns of sprawl development is an issue of Federal concern, as well as impact on the future availability and costs of goods and services in the community. Finally, there is concern that Federal actions respecting the location of large commercial developments be consistent with state, area-wide and local plans as well as the provisions of the President's Policy to Conserve America's Communities.

Community impact analyses are to address the issues enumerated above. They must also discuss the general impact of the pending Federal action on the surrounding metropolitan area and the community where the development itself is located.

The Guidelines characterize the community impact analysis as a rapid review and a consultative process to be performed without prejudgement. Relevant secondary sources of information on local demographic, economic base, and market conditions are to be utilized in preparing the report.

#### Outline of this Report

The report which follows has been prepared by Rivkin Associates, Inc. at the direction of the U.S. Department of Housing and Urban Development. The remainder of this section describes the Federal actions which are

related closely to the Mall proposal and its surroundings. Sections III and IV describe population trends and economic prospects in the New Haven Region, and discuss retail activities and retail potentials in the region. Sections V and VI identify the probable impacts of the proposed mall on established communities in the region. Section VII discusses the relationship of the mall proposal to state, regional, and local public policy. The concluding sections of the report identify possible actions to mitigate the development's impacts, estimate the probable consequences of a failure to take the Federal actions involved or to build the mall, and summarize the general conclusions of the study.

#### Principal Issues

The major questions on which this report is based are the following.

1. Will the proposed shopping center have a substantial economic impact on established business centers in the South Central Connecticut Region?
2. Will the center have other important socioeconomic impacts on existing communities in the Region?
3. How will the shopping center affect major past and programmed Federal investments in revitalizing New Haven?
4. What significant environmental and energy-use impacts are likely to result from the construction and operation of the proposed shopping center?
5. Can negative socioeconomic, environmental, and energy-use impacts of the center be mitigated by feasible public or private actions?

#### B. Requests for Community Impact Study

On January 17, 1980, in response to a U.S. Corps of Engineers request for comments on a proposed permit for the placing of fill material in areas related to the Quinnipiac River in North Haven, Connecticut.

John Sawyer, the Development Administrator for the City of New Haven, addressed a letter to the Corps outlining the City's opposition to the proposed shopping center for which the fill project was needed. Mr. Sawyer's letter, which is included in full as Appendix A to this report, made the following points about the shopping center and the fill work.

1. The shopping center, proposed at more than one million square feet of floor space, would "create far-reaching, long-term irreversible and irretrievable economic impacts throughout the region" sharply reducing jobs and tax base in the City of New Haven.
2. The shopping center would be in conflict with policies of the State of Connecticut calling for revitalization and enhancement of the stability of older established urban areas, the conservation of energy, and the enhancement of mass transit.
3. The filling of the site and construction of the mall would displace an important flood storage area and increase polluted runoff in a major aquifer recharge area.

The letter also cited the probable effects of the mall on flora and fauna, air quality, noise, traffic, and other factors, and pointed out that some off-site improvement problems had not been resolved, that the zoning under which the mall was to be built was procedurally defective, and that the proposal violates the Connecticut Environmental Policy Act.

On April 8, 1980, New Haven Mayor Biagio DiLieto wrote to Robert Embry, of the Department of Housing and Urban Development, confirming the City's concern about the North Haven Mall development, making many of the same points about its probable impacts. (See Appendix B for the full text of Mayor DiLieto's letter.) Mayor DiLieto stated that the City of New Haven would consider issuance of the Corps permit and the use of Federal funds for projects making the Mall possible to be "in direct conflict with the letter and intent of the President's Urban Policy and Community Conservation Guidelines", and listed the extensive



community development efforts being carried out by the city.

C. Federal Actions Affecting Mall Feasibility

The Federal interest in the North Haven Mall arises out of several projects which will affect its feasibility. The first of these is the permit under Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act for filling of wetlands and backwater areas on the site of the proposed Mall. Issuance of this permit by the U.S. Army Corps of Engineers will be necessary to construction of the Mall.

Another project involving Federal funding is a widening of Bishop Street east of the Wilbur Cross Parkway. There is some question about the relationship of this improvement to the Mall proposal, but its completion would certainly facilitate, among other things, access to the Mall site. Bishop Street is the connecting link between Interstate 91 (the New Haven - Hartford express highway) and the parallel Wilbur Cross Parkway (Route 15) which share the function of carrying through traffic from Central Massachusetts to Hartford, New Haven and New York. They also serve as the major north-south spine within the South Central Connecticut Region. Bishop Street would be a principal access route to the North Haven Mall. According to the FHWA Connecticut Division Office, while the Bishop Street improvement is not dependent on the Mall and would go forth in any case, the Mall is dependent on the improved Bishop Street. Under State of Connecticut regulations, Bishop Street would have to be improved in order for the mall developer to obtain access from the site to the State highway.

Federal funding is being sought by the Town of North Haven for off-site trunk and lateral sewers to serve the North Haven Mall site. This funding has not been approved, and we understand from the State Department of Environmental Protection that it will not be available for this project for a period that may be as long as one to five years. Funds have also been requested for the first phase, involving planning and design, of the expansion of the North Haven sewage treatment plant. Although the mall's sanitary sewer hook-up permit may be contingent on the completion of this project, the planned expansion will be necessary whether or not the mall is built. Treatment capacity improvements are unlikely to be ready before 1985. North Haven could not say whether alternative funding for sewer,

water and sewage treatment projects to advance the mall construction could be found should Federal funds not be granted until, say, 1985.

D. Description of the North Haven Mall

Location. The location proposed for the new mall in North Haven is very central within the South Central Connecticut Region. It is positioned between the Wilbur Cross Parkway (Route 15) and Interstate Highway 91, two generally parallel highways that connect New Haven with Hartford and central Massachusetts to the north and, via Merritt Parkway and Interstate 95, with the New York Metropolitan Area to the southwest. These highways are also the main north-south spine for the region. In recent years, particularly, I-91 has also been the focus for new industrial development in the area.

Access. Access to the Mall would be from a Valley Service Road which connects at its southern end with an existing access ramp to Interstate 91, and Bishop/Clintonville Road. Near the northern end of the mall site the Valley Service Road would connect with a "Mall Drive". The Mall Drive has been designed to pass under the Conrail tracks and intersect with Washington Street to the east, just north of the Washington Street - I-91 interchange.

Bishop Street would provide a connection to an interchange with the Wilbur Cross Parkway, about a mile from the Mall entrance.

The Mall site is visible from portions of Interstate 91 and the Wilbur Cross Parkway.

Traffic approaching the Mall from the west via Bishop Street would have to make a left turn onto the Valley Service Road. Traffic approaching from the south via I-91 and the Washington Street interchange will also have to make a left turn onto the Mall Drive in order to enter the shopping center site.

Surrounding Land Uses. The Mall would be built between the Quinnipiac River and the Conrail tracks in a light industrial zoning district.

West of the Quinnipiac, from the river to the Wilbur Cross Parkway, is state parkland. Beyond the Wilbur Cross is a low density residential

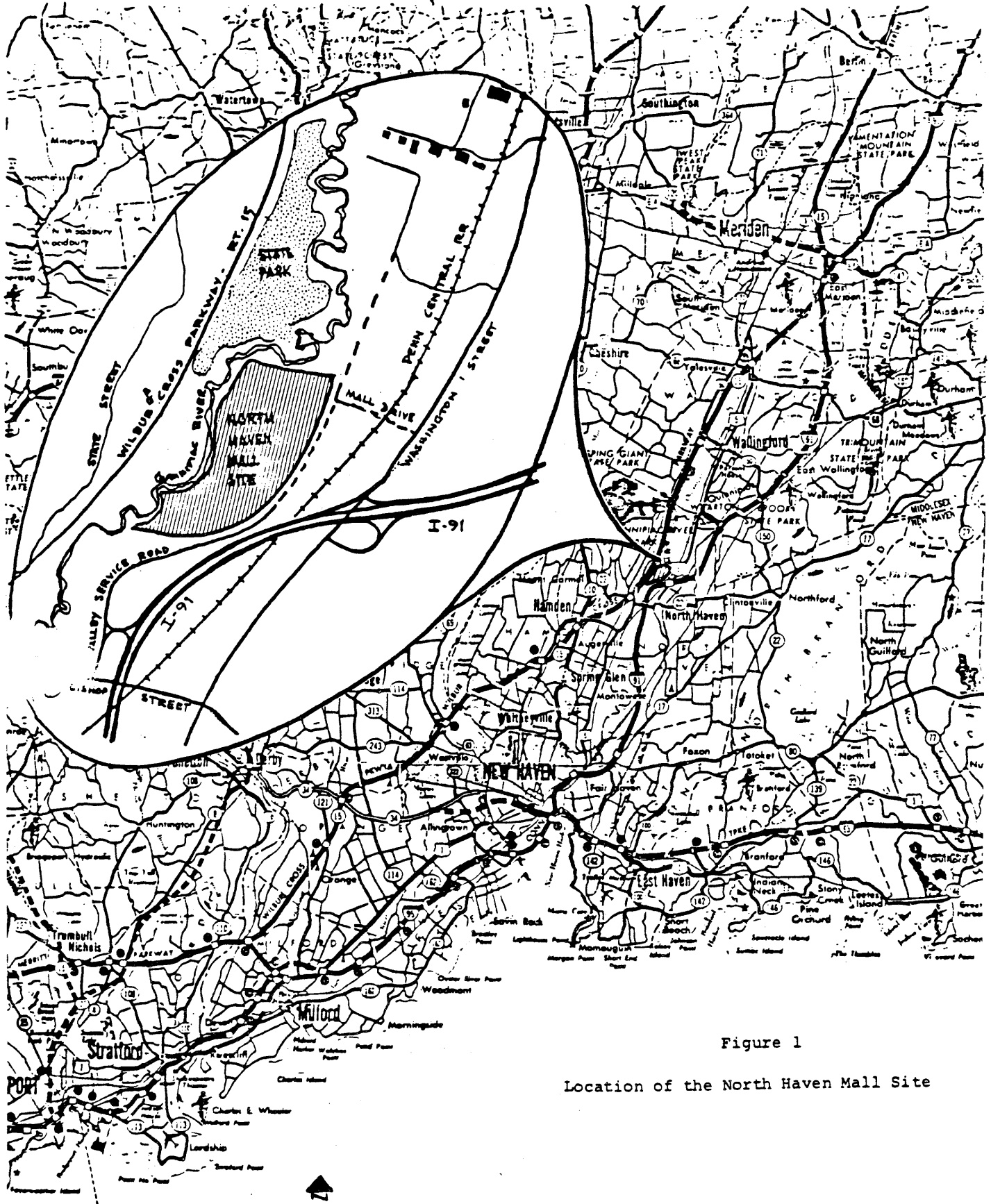


Figure 1

Location of the North Haven Mall Site

area and a school. To the northeast of the proposed mall, along the railroad, are several industrial establishments; and to the east is a commercial strip along Washington Street, currently North Haven's principal business area.

Southward in the river valley are undeveloped river-bottom areas and additional light industrial activities.

The mall site is generally well buffered from nearby residential areas by Interstate 91, the railroad, the state park and nonresidential districts. Bishop Street and Washington Street, both of which would have important roles in access for the mall, do pass through established residential neighborhoods.

Characteristics of North Haven Setting The Town of North Haven is a moderate-density municipality, residential in its eastern and western sections, with a corridor of commercial and industrial use running along the Quinnipiac River, the Conrail line, and Interstate Route 91 through the center of the town. This industrial district contains substantial activity: the Town included over 9,000 industrial employees in 1977.<sup>1</sup> Total employment in North Haven was estimated at 16,800 in that year.

Population in North Haven was estimated to be 23,700 persons in 1978, a 6.7 percent increase from the 22,194 persons reported in the 1970 Census. Its population growth was appreciably higher than that of the South Central Connecticut Region, and somewhat above that for the state as a whole. The State Office of Policy and Management has projected the town's population to grow to 24,475 by 1990 and 25,150 by 2000, a total of less than 3,000 persons in the 1970-2000 period.

The site of the proposed North Haven Mall is in the north central part of North Haven in the corridor between Route 15 and I-91 that has been designated for industrial development in conjunction with the selection of the route for I-91.

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1. Connecticut Labor Department, cited in Connecticut Department of Economic Development, Connecticut Market Data, 1979, Hartford, 1979.

Proposed Retail Development The proposed North Haven Mall would be an enclosed shopping center of 1,207,350 square feet gross building area<sup>2</sup> plus 5600 parking spaces. The structure and paved parking area together will cover 78 acres of the 117 acre site. The remainder of the site will accommodate a 17 acre storm water retention pond or remain undeveloped. Publicized plans call for four department stores: R.H. Macy, G.Fox, Sears Roebuck and Co. and J.C. Penney (to occupy 720,000 square feet of store space ranging from a 149,000 square foot Penney's and 171,000 square foot Sears to 200,000 square foot stores for the other two). Mall stores and a theatre will occupy close to 487,500 square feet more.

A storm water retention pond will be located at the southern end of the site where there is currently a backwater area which accumulates runoff. A channel encroachment area, or flood plain of 23 acres along the western perimeter of the site will remain restricted from development.

Status of the Mall Proposal The North Haven Mall, a project of Mall Properties, Inc. of New York City, has been in various stages of planning and development for a number of years. The developer is reported to have received an Indirect Source Permit from the Connecticut Department of Environmental Protection and an Inland Wetlands Permit (for placing fill on the site) from the Town of North Haven.

The company has applied for a Storm Water Discharge Permit from the Connecticut DEP, a Certificate of Operations from the Connecticut Department of Transportation, and permits under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act from the U.S. Army Corps of Engineers.

The project is also awaiting a decision by the Town of North Haven on an amendment to the light industrial zoning district to allow shopping centers and, if the amendment is approved, will be subject to site plan approval by the North Haven Planning and Zoning Commission. North Haven will hold a hearing on the zoning amendment on May 19. On May 15th the Regional Planning Agency of South Central Connecticut will meet to decide

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2. Initially 1.17 million square feet would be built, allowing for a subsequent 35,000 square foot expansion of the G. Fox store.

its position regarding this amendment.

The Corps of Engineers has determined that issuance of a fill permit is a "major federal action with significant potential impact on the quality of the human environment". Consequently, the New England District published in December 1979 its "notification of intent" to file a full environmental impact statement on the Mall's permit application. The Corps has scheduled "scoping" sessions on May 13 in North Haven to receive initial public comment on its outline for the environmental impact statement. The draft environmental report is scheduled for completion late in 1980 and the final report, for early 1981.

### III. CHARACTERISTICS OF THE SOUTH CENTRAL CONNECTICUT REGION

#### A. Definition of the Region for Analysis

The central position of the North Haven Mall project with respect to the population concentrations, highways and boundaries of the South Central Connecticut Region indicates that this area, delineated by the state for planning purposes, rather than the smaller New Haven SMSA should be the "region" under analysis in this present study. The SCCRPA territory includes the City of Milford (the easternmost community of the Bridgeport SMSA), the Meriden SMSA (Coterminous with the City of Meriden) and the New Haven SMSA (except for the easternmost town of Clinton). When data have been available for Clinton, this community has been included in the regional analysis. See Figure 2 .

The 383 square mile area under study, is triangular in shape. It extends approximately 20 miles from downtown New Haven northward to Meriden, and eastward to Clinton, and 10 miles westward to Milford. It includes sixteen cities and towns. The Town of North Haven is at the geographic center of this region. The Wilbur Cross Parkway (Route 15) and Interstate Highway 91 (between New Haven and Hartford) run generally parallel to each other and the Conrail line, forming the Main north-south transportation spine of the region. Interstate Highway 95, which links New Haven with Providence/Boston to the northeast and New York to the southwest, crosses the southern end of the region and serves as its major east-west artery.

In the nineteenth century, New Haven's industrial development and active port raised the city to a position of dominance over this territory. A hundred years later, however, shifts to a highway-oriented economy and a shrinking manufacturing sector have quite reversed New Haven's situation within its surrounding region.

With an estimated 1980 population of somewhat under 130,000, the City of New Haven is still the largest city in the region. Yet it has fewer than one-third the residents of its SMSA, a little over one-third of the labor force and about one-third of the SMSA jobs. Within the larger South Central

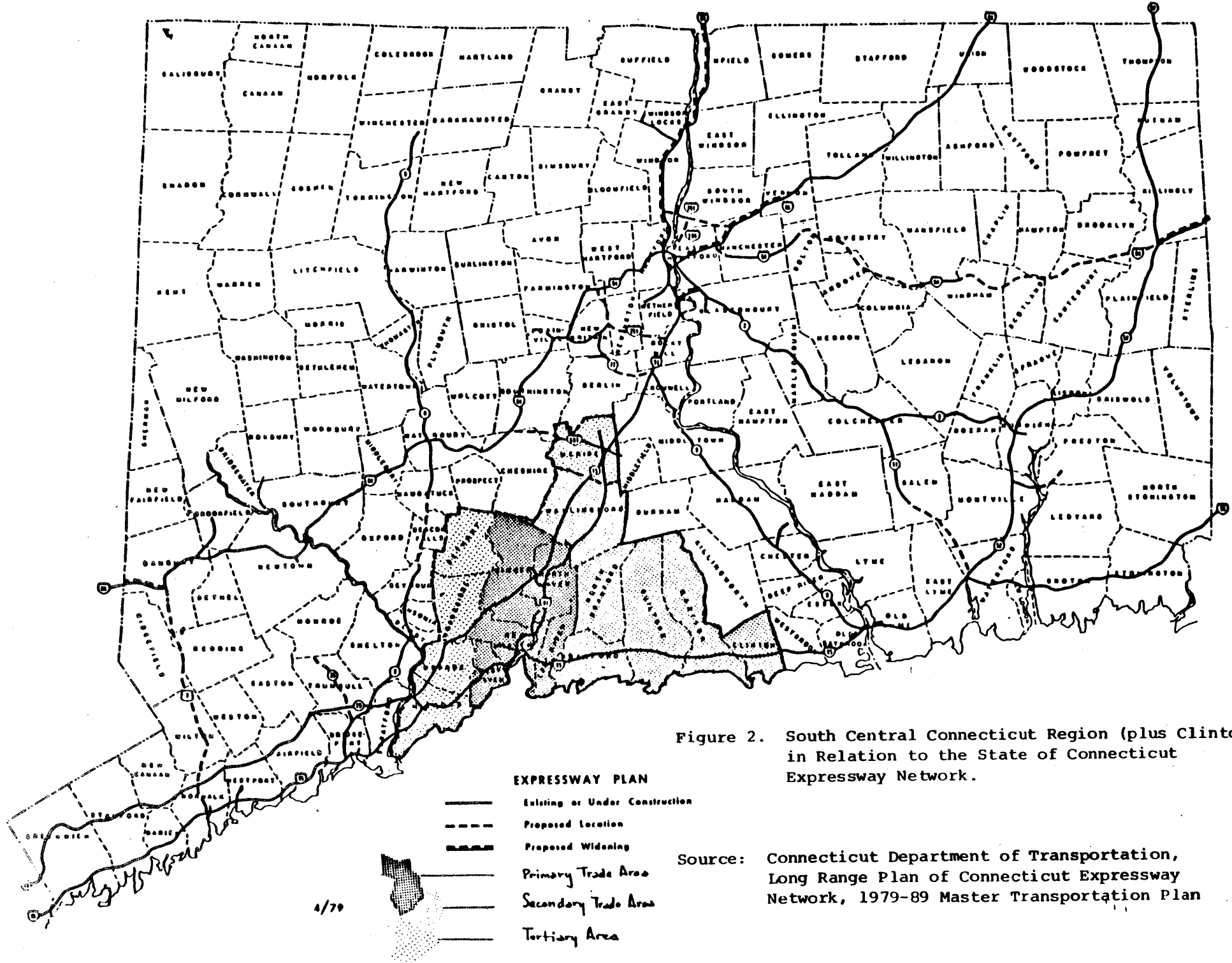


Figure 2. South Central Connecticut Region (plus Clinton) in Relation to the State of Connecticut Expressway Network.

Source: Connecticut Department of Transportation, Long Range Plan of Connecticut Expressway Network, 1979-89 Master Transportation Plan



Connecticut Region, New Haven's population is about 25 percent of the total. The gross income of its residents is just under 20 percent of the regional total. The Cities of Meriden and Milford, at 57,350 and 51,750, respectively, have 11 and 10 percent of the region's total population.

Although retail trade patterns are quite dispersed through the region, New Haven's central business district is still the largest single concentration of retail activity in the area. Based on the findings of a shoppers' survey, a Connecticut marketing consultant<sup>3</sup> has delineated primary and secondary retail trade areas within the New Haven SMSA. These are shown in Figure 2. We have organized data in the report accordingly, grouping the remaining communities in the larger region under a "tertiary area" heading.

#### B. Demographic, Housing, and Income Trends

Population Trends. Total population in the region is estimated at 534,200 in 1980. Growth since 1970 has been at a virtual standstill--only 3.1 percent over the 10-year period, amounting to an average annual increase of no more than 1,600. This was well below Connecticut's modest overall growth of 6.5 percent for the decade, making the region one of the slowest growing in the state.

Within the region, however, there have been some striking shifts. Dispersal of population from the heart of the region to its periphery has continued to the degree that the primary trade area for New Haven has dropped from over 55 percent of the region's total to a level approaching only half. The State's estimate for 1980 put the total for these central communities at 53 percent. Yet the U.S. Census Office of Revenue Sharing estimated that tipping below the 50 percent mark had already occurred by 1977. Their estimates showed the five communities that constitute New Haven's primary trade area with 48.2 percent of the region's population in mid-1977. Correspondingly, the secondary trade area has risen in relative size to a level exceeding 20 percent of the region's population. During this same period, population in the central city of New Haven

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3. Halcyon Ltd. of Hartford.

dropped below the 25 percent mark. The resulting level for New Haven was somewhat less than that of the tertiary area, which meanwhile remained fairly stable at 25 percent of the regional total. See Figures 3 and 4.

New Haven and East Haven lost a combined total of 8,300 population over the decade. West Haven, Hamden and North Haven gained 1,000, 1,340 and 1,770 respectively (1.9, 2.3 and 8 percent). This meant a net loss for New Haven's primary trade area of a little over 4,000 or 1.5 percent.

Growth of nearly 16 percent was registered for the secondary trade area communities. Their estimated gain of 15,700 was close to the net increase for the region as a whole. The most dramatic changes occurred in the towns of Madison, Guilford, Clinton, and North Branford which grew by 44.9 percent, 39.2, 11.2, and 10.9 percent respectively.

In the peripheral, or tertiary, area Bethany and Woodbridge experienced the greatest change relative to their 1970 populations, 16.7 and 12.1 percent, respectively. The more developed Meriden and Milford grew from 55,960 and 50,860 to 57,350 and 51,750, which meant rates of 2.5 and 1.8 percent, respectively.

Housing. Against the background of a virtual no-growth situation for the region as a whole over the past decade, residential building trends present a seemingly paradoxical picture. The number of housing units in the region increased by 27,400 (more than 16 percent) between 1970 and 1978. More than 40 percent of these were in the primary trade area; 15 percent, in New Haven alone. Close to a third of the total new housing construction was in the secondary trade area and almost a fourth of the new units were in the tertiary area. See Figure 5.

This was the result of intra-regional population shifts, among other possible factors. It is significant, however, that the communities recording the largest numbers of new dwelling units were the Cities of New Haven (almost

FIGURE 3: Population and Income for Cities and Towns within the New Haven CBD Trade Area, 1977

	Population (July 1, 1977) <sup>a</sup>	Percent of Total Trade Area	Per Capita Income (Calendar 1977) <sup>b</sup>	Gross Income 1977	Percent of Total Trade Area
<b>Primary Trade Area</b>	272,570	52.2	5,534 <sup>c</sup>	1,508,399,798	48.2
New Haven (City)	122,085	23.4	5,032	614,331,720	19.6
West Haven (City)	52,190	10.0	5,554	289,863,260	9.3
East Haven	24,897	4.8	5,151	128,244,447	4.1
North Haven	23,203	4.4	6,737	156,318,611	5.0
Hamden	50,195	9.6	6,368	319,641,760	10.2
<b>Secondary Trade Area</b>	113,017	21.7	6,438 <sup>c</sup>	727,622,877	23.3
Branford	22,842	4.4	6,907	157,769,694	5.0
North Branford	11,928	2.3	5,727	68,311,656	2.2
Guilford	16,148	3.1	7,070	114,166,360	3.7
Madison	13,575	2.6	7,107	96,477,525	3.1
Wallingford	37,394	7.2	6,058	226,532,852	7.2
Clinton	11,130	2.1	5,783	64,364,790	2.1
<b>Tertiary Area</b>	136,125	26.1	6,547 <sup>c</sup>	891,255,906	28.5
Meriden (City) <sup>d</sup>	57,135	11.0	5,596	319,727,460	10.2
Bethany	4,354	.8	7,638	33,255,852	1.1
Woodbridge	8,315	1.6	11,284	93,826,460	3.0
Orange	13,949	2.7	8,494	118,482,806	3.9
Milford <sup>e</sup>	52,372	10.0	6,224	325,963,328	10.4
<b>Total Trade Area</b>	521,712	100.0	5,994 <sup>c</sup>	3,127,278,581	100.0
<b>SMSA Total (i.e. excluding Meriden &amp; Milford)</b>	412,205	= 79.0	6,020 <sup>c</sup>	2,481,587,793	= 79.4
<b>SCORPA Total (i.e. excluding Clinton)</b>	510,082	= 97.9	5,999 <sup>c</sup>	3,062,913,791	= 97.9

a. Source: Current Population Reports, Series P - 25, #820, November 1979, U.S. Bureau of the Census, Revenue Sharing Office.

b. Source: Computer Tabulations for Current Population Reports, Series P-25, to be published in June 1980, U.S. Bureau of the Census, Office of Income Statistics

c. Weighted average

d. Meriden is a separate SMSA

e. Milford is part of the Bridgeport SMSA.

Figure 4: Population Trends in the New Haven Trade Area, SMSA, and in the South Central Connecticut Regional Planning Area, 1970 - 1990

	Census 1970	Estimated 1980	Change #	'70-'80 %	Projected 1985	Change #	'80-'85 %	Projected 1990	Change #	'85-'90 %	Change #	'80-'90 %
<b>Primary Trade Area</b>	287,229	283,060	-4,169	-1.5	282,400	- 660	- .2	285,530	3,130	1.1	2,470	.9
New Haven (City)	137,707	130,000	-7,707	-5.6	128,000	-2,000	-1.5	130,000	2,000	1.6	0	--
West Haven (City)	52,851	53,850	999	1.9	54,450	600	1.1	54,800	350	.6	950	1.8
East Haven	25,120	24,550	- 570	-2.3	24,600	50	.2	24,950	350	1.4	400	1.6
North Haven	22,194	23,960	1,766	8.0	24,250	290	1.2	24,480	230	1.0	520	2.2
Hamden	49,357	50,700	1,343	2.3	51,100	400	.8	51,300	200	.4	600	1.2
<b>Secondary Trade Area</b>	99,004	114,740	15,736	15.9	118,740	4,000	3.5	122,400	3,660	3.1	7,660	6.7
Dranford	20,444	22,470	2,026	9.9	22,940	470	2.1	23,390	450	2.0	920	4.1
North Branford	10,778	11,950	1,172	10.9	12,100	150	1.3	12,350	250	2.1	400	3.4
Guilford	12,033	16,750	4,717	39.2	17,520	770	4.6	18,250	730	4.2	1,500	9.0
Madison	9,768	14,150	4,382	44.9	14,850	700	5.0	15,650	800	5.4	1,500	10.6
Wallingford	35,714	38,000	2,286	6.4	39,500	1,500	4.0	40,500	1,000	2.5	2,500	6.7
Clinton	10,267	11,420	1,153	11.2	11,830	410	3.6	12,260	430	3.6	840	7.4
<b>Tertiary Area</b>	131,871	136,400	4,529	3.4	137,900	1,500	1.1	139,050	1,150	.8	2,650	1.9
Meriden (City) <sup>a</sup>	55,959	57,350	1,391	2.5	57,900	550	1.0	58,250	350	.6	900	1.6
Bethany	3,857	4,500	643	16.7	4,650	150	3.3	4,800	150	3.2	300	6.7
Woodbridge	7,673	8,600	927	12.1	8,700	100	1.2	8,800	100	1.2	200	2.3
Orange	13,524	14,200	676	5.0	14,400	200	1.4	14,600	200	1.4	400	2.8
Milford <sup>b</sup>	50,858	51,750	892	1.8	52,250	500	1.0	52,600	350	.7	850	1.6
<b>Total Trade Area</b>	518,104	534,200	16,096	3.1	539,040	4,840	.9	546,980	7,940	1.5	12,780	2.4
<b>SMSA Total (i.e. excluding Meriden &amp; Milford)</b>	411,287	425,100	13,813	3.4	428,890	3,790	.9	436,130	7,240	1.7	11,030	2.6
<b>SCCRPA Total (i.e. excluding Clinton)</b>	507,837	522,780	14,943	2.9	527,210	4,430	.8	534,720	7,510	1.4	11,940	2.3

a. Meriden is a separate SMSA, coterminous with the city.

b. Milford is part of the Bridgeport SMSA.

Source: State of Connecticut, Office of Policy and Management, Comprehensive Planning Division, Population Projections for Connecticut Municipalities and Regions to the Year 2000, February 1980.

Figure 5 : Residential Construction in the South Central Connecticut Region (plus Clinton) 1970-78

	#Dwelling Units 1970 <sup>1</sup>	#Dwelling Units 1978 <sup>2</sup>	Increase in Dwelling Units 1970 - 1978 <sup>2</sup>		Percent of New Dwelling Units Constructed in Trade Area 1970 - 1978
			#	%	
<u>Primary</u>					
<u>Trade Area</u>	96,317	108,178	11,861	12.3	43.3
New Haven	48,893	52,950	4,057	8.3	14.8
West Haven	17,649	20,212	2,613	14.8	9.5
East Haven	7,457	8,879	1,422	19.1	5.2
North Haven	6,331	7,437	1,106	17.5	4.0
Hamden	15,987	18,650	2,663	16.7	9.7
<u>Secondary</u>					
<u>Trade Area</u>	32,086	40,940	8,854	27.6	32.3
Branford	7,427	9,474	2,047	27.6	7.5
North Branford	2,977	3,572	595	20.0	2.2
Guilford	3,967	5,962	1,995	50.3	7.3
Madison	3,566	5,137	1,571	44.1	5.7
Wallingford	10,612	12,678	2,066	19.5	7.5
Clinton	3,537	4,117	580	16.4	2.1
<u>Tertiary Area</u>	41,280	47,976	6,696	16.2	24.4
Meriden	18,352	21,640	3,288	17.9	12.0
Bethany	1,125	1,377	252	22.4	.9
Woodbridge	2,296	2,712	416	18.1	1.5
Orange	3,812	4,227	415	10.9	1.5
Milford	15,695	18,020	2,325	14.8	8.5
<b>TOTAL TRADE AREA</b>	169,683	197,094	27,411	16.2	100.0

<sup>1</sup>Source: Connecticut Market Data, 1979, Connecticut Department of Economic Development, pp. 77-80.

<sup>2</sup>Source: Construction activity authorized by building permits, housing units in Connecticut, Annual Summary, 1978, Department of Housing, State of Connecticut.

15 percent) and Meriden (12 percent), where approximately 4,000 and 3,300 new units were developed, respectively. West Haven and Hamden each had more than 2,600 new units and Milford, over 2,300.

Data on 1975-76 residential building permits for the New Haven SMSA as a whole and for the City of New Haven give some indication of the types of units added to the region's housing stock. Of the 3,173 permits issued in those two years for the SMSA as a whole, 60.2 percent were for single family units, 6.6 percent were for units in multi-family structures of 2-4 units and 33.2 percent were in multi-family structures of 5 units or more. Of the 561 permits issued in the City of New Haven, only 2.1 percent were for single family units, 10.7 percent were in smaller multi-family structures and 87.2 percent were in larger apartment buildings.

More precise data on the distribution of assisted housing in the region may be forthcoming in the detailed EIS studies, but from the evidence on construction activity, it appears to have had a considerable role in the central city of New Haven.

Projections for the Future. This year, 1980, appears to be an important watershed in the view of Connecticut's demographers, if the most recent projections published by the state's Office of Policy and Management can be taken as an indication. They may have been looking at the concerted public policy efforts to stimulate residential building activity in the central city and the restrictive, low density housing development policies in the surrounding suburban communities. Their figures show a "bottoming-out" of the downward population trends at the heart of the SCCRPA region, with a turning point occurring about 1985. See Figure 3.

The projections envision, in effect, a stabilizing period for the region as a whole over the next five years and resumption of growth at a very slow rate during the 1985-90 period. Total growth over the entire ten-year period is expected to be only 2.4 percent for the region, which would bring the 1990 population to a level of 547,000. Increase over the decade would thus be less than 13,000 altogether.

The primary trade area population is projected to stabilize and, by the end of the decade, show a tiny one percent increase. New Haven itself would stop declining and have 130,000 population in 1990. In the secondary area, growth rates are anticipated to slow down to less than 7 percent for the decade, resulting in total increases of 7,660 (half the gain experienced in the 1970-80 period). Madison and Guilford would be the fastest growing communities still, but at rates one-third to one-fourth those of the 1970's and with absolute increases of no more than 150 per year. Population growth in the tertiary area is seen to be almost insignificant--only 2,600 or 1.9 percent between 1980 and 1990.

At the end of the coming decade then, the regional distribution of population, according to these projections, would be as shown in Figure 6. The City of New Haven would stand at somewhat less than a quarter of the total. New Haven together with its immediately adjoining communities at the heart of the region, would retain the majority of the region's population. Population of the secondary area would approach that of the City of New Haven itself but would still be somewhat less than that of the central City, and the tertiary area would retain its 25 percent share of the region total.

Figure 6: Population Dispersion within the Trade Area

	<u>Percent of Region's Population</u>			
	<u>1970</u>	<u>1980</u>	<u>1985</u>	<u>1990</u>
Primary Trade Area	55.4	53.0	52.4	52.2
City of New Haven	26.6	24.3	23.7	23.8
Secondary Trade Area	19.1	21.5	22.0	22.4
Tertiary Area	25.5	21.5	25.6	25.4

Source: Cooperative forecasts of the State of Connecticut, Office of Policy and Management, February 1980.



Income Trends. All told, the region experienced income growth of 42.8 percent between 1970 and 1975. Despite this apparent sign of prosperity, inflation resulted in a net decrease in real income. The consumer price index rose 47 percent over the five-year period. The effects of inflation have hit hardest at those individuals and areas with the slowest growth. The discrepancy between the older, established communities and the newer suburbs in the South Central Connecticut Region is dramatic, and growing.

Between 1969 and 1975 the per capita income in the City of New Haven increased from \$3,169 to \$4,458, a 40.7 percent rise. Over the same period the U.S. per capita income rose 54.6 percent. However, when inflation is taken into account and these figures are converted into constant dollars, the City of New Haven shows a 4.2 percent decrease in real per capita income over this period, while the national figure represents a 5.3 percent real increase. The decline of the city's income relative to the nation as a whole is strikingly depicted by the fact that in 1969 New Haven per capita income was \$50 above the U.S. average, but by 1975 it had fallen to \$363 below the national average.

The region as a whole has fared considerably better than its major city in this regard. Overall per capita income for the region in 1975 was \$5,187, or \$366 more than the national average.<sup>4</sup> If the City of New Haven is excluded from the calculations, per capita income for the region rises to \$5,502, or \$681 more than the national average. New Haven, West Haven, and East Haven are the only communities in the region with per capita incomes below the national average.

The Connecticut State Labor Department estimated that in 1979 48,710 area residents--11.6 percent--had incomes below the poverty level. This represents an increase of over 12,000 in the number of poverty level persons since 1970, when 8 percent of the area's population were in that category. An estimated 70 percent or more of the region's poverty level population resides in the City of New Haven.

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4. This discussion is based upon the Overall Economic Development Program report for New Haven, 1979-1980, and hence reflects that definition of the region--i.e., the labor market area which excludes Meriden, Milford, and Clinton.

The region's Overall Economic Development Plan (OEDP) report notes that non-manufacturing industries in the area pay substantially lower wages than manufacturing industries. This tends to be particularly true of the services and wholesale and retail trade sectors. As discussed below in the section on economic base and employment, these are the sectors which represent increasingly larger proportions of the area's-- and the city's--economy. They are projected to expand in proportion to the total over the coming decade. The OEDP report concludes that "the trend away from a highly skilled and unionized manufacturing economy towards a white-collar, service-based economy is eroding the buying power and standard of living in the region." This is particularly true for the City of New Haven where the largest concentration of households at the lower end of the socio-economic scale are living.

#### C. Economic Base and Employment

Like most other northeastern urban areas over the past 30 years, the City of New Haven and its surrounding regions experienced a diminishing manufacturing base. There has been a corresponding increase in the importance of the non-manufacturing sector, with a significant alteration in the area's employment profile. At the end of World War II, 40 percent of the city's jobs were in the manufacturing sector. In 1980, total employment in the City is approximately the same, yet only 20 percent of the jobs are in manufacturing. Accompanying the decline in the manufacturing sector overall has been a shift in location of the jobs that remain, from central city to suburban areas. Among the most significant reasons for this shift was the construction of Interstate Highways I-91 and I-95. The highways displaced industry from the 19th century structures in the central city while simultaneously improving intra- and inter-regional access to the relatively inexpensive land located in the outlying areas.

To a large extent, jobs lost in the manufacturing sector have been replaced by jobs in other sectors. In New Haven, the growth sectors have been retailing, education (especially college and university level), transportation, government, banking, and professional services (particularly health services). Research (particularly health research and development), services and recreational activities are gaining ever-greater proportions of the region's economic base. The City, however, has done

less well in replacing lost manufacturing jobs and in retaining and expanding its industrial base than the region as a whole. In recent years New Haven has continued to lose major manufacturing employers. The 1979-80 Overall Economic Development Program (OEDP) report for the region cites three major firms which closed their New Haven facilities in the past year, resulting in a loss of 900 jobs.<sup>5</sup> A fourth firm laid off 250 workers.

New Haven is undertaking an aggressive program aimed at retaining and, where possible, expanding existing industries. The program has met with some success. In addition, the New Haven Development Corporation has been established as a vehicle for encouraging economic growth in the city. New Haven has a disadvantage relative to the suburban areas in attracting major new industries. Its supply of industrial land is limited and more expensive on the whole.

The City is concentrating its efforts in the sectors where it can capitalize on its advantages: development of the Port of New Haven, airport-related development in conjunction with the Town of East Haven, rehabilitation of existing vacant or underutilized physical plants to provide expansion room for existing industries and low-cost "incubator" space for fledgling enterprises, expansion of the health service and research industries associated with the Yale-New Haven Hospital, retention and expansion of the government sector with a nearly completed major government center housing Federal and local offices and a new state office complex in the planning stages, commercial revitalization and expansion, and extension of the arts, cultural and entertainment/recreational activities afforded by the downtown and the waterfront.

Employment Profile. Detailed employment figures for the City of New Haven have been compared with those for the greater New Haven Labor Market Area (LMA). The LMA defined by the OEDP includes all of the jurisdictions within the South Central Connecticut Regional Planning Area except Meriden and Milford. See Figures 7 and 8.

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5. Overall Economic Development Program, 1979-80, Office of Economic Development, New Haven, 1979.

Figure 7.

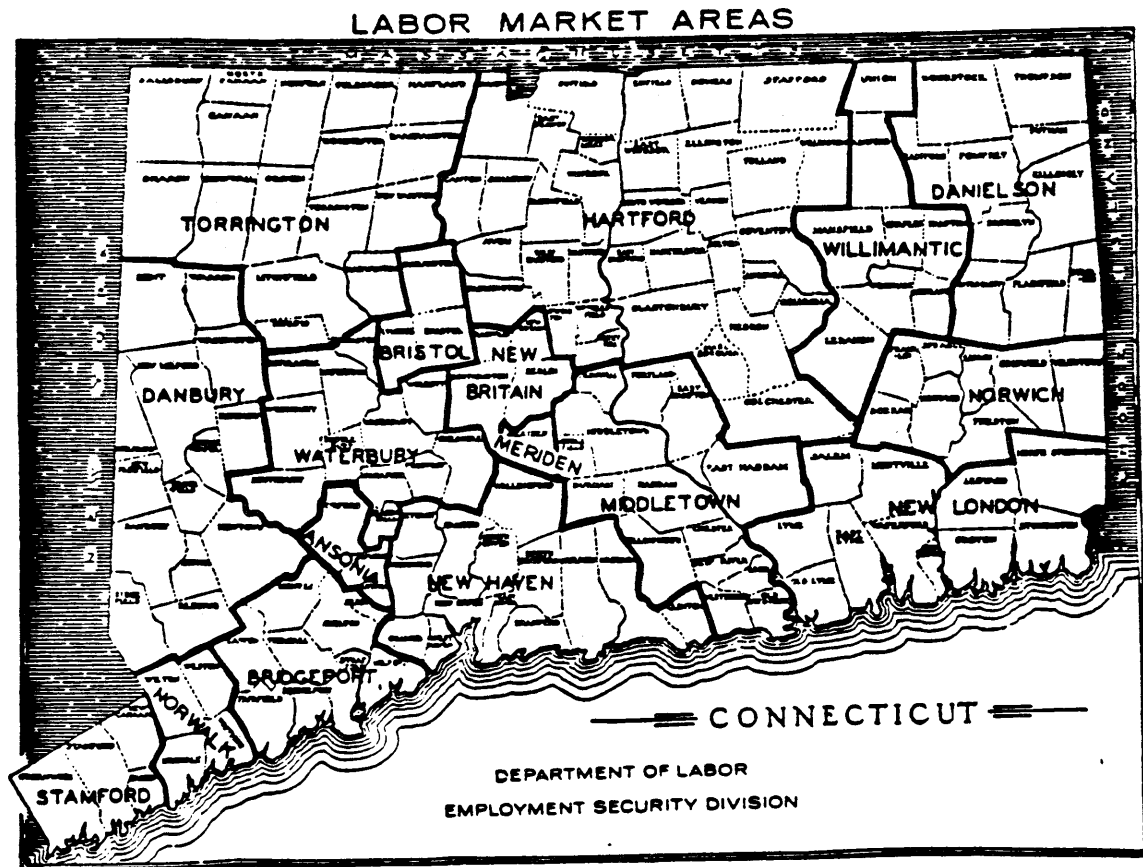


Figure 8 : Employment by Industry, City of New Haven, and New Haven Labor Market Area, 1970

	City of New Haven		Balance of New Haven Labor Market Area	
	#	%	#	%
<u>Total Employment</u>	56,495	100.0	111,365	100.0
<u>Manufacturing</u>	14,585	25.8	31,375	28.2
<u>Non-manufacturing</u>				
Construction	2,728	4.8	6,689	6.0
Transportation	1,734	3.1	3,912	3.5
Communications, utilities	2,109	3.7	4,631	4.2
Wholesale trade	2,072	3.7	5,288	4.8
Retail trade	7,551	13.4	17,909	16.1
FIRE <sup>a</sup>	2,245	4.0	5,979	5.4
Services	20,480	36.3	28,808	25.9
Pub. Admin./Gov't.	2,231	4.0	4,751	4.3
Other	760	1.4	2,023	1.8

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a. Finance, insurance and real estate

Source: 1970 Census of Population and Housing, New Haven SMSA, Table P-3, Labor Force Characteristics of the Population.

Employment figures in the 1970 Census indicate that the City's employment profile was quite similar to that of the rest of the labor market area. Figure 9 shows the distribution of employment by industrial sector for both City and remainder of the LMA. Service industries were relatively much more important in New Haven, however: (36.3 percent of central city residents' employment in comparison with 25.9 percent for the rest of the labor market area). Retail trade was the second most significant source of non-manufacturing employment for both city workers (13.4 percent) and suburbanites (16.1 percent). Retailing was proportionally more important as a source of employment for suburban residents than for New Havenites, however.

Despite the City's energetic and often effective efforts to retain and improve its employment base, New Haven has but about one-third of the jobs in the labor market area. The rest are in suburban jurisdictions. There is an imbalance between the number of jobs in the city and the size of its labor force in virtually every industrial category. This is shown in Figure 9. While New Haven's labor force was 34 percent of the region's total in 1970, the City had 31 percent or fewer of the jobs in nearly every category. Only in the services industries did the city have a larger share of the region's jobs than its resident labor force could fill. Though retailing was important in the City's employment base, over 70 percent of the region's retailing jobs were outside, in the suburbs. By 1977, the central city's share of retailing jobs had dropped to 24 percent of the regional total.

Unemployment. The failure of the city to keep pace with its economic needs, and with the rest of the region, is reflected in a variety of measures, one of the most significant being the unemployment rate. The OEDP report indicates that June 1979 unemployment in the New Haven LMA as a whole including the City of New Haven was about 5.3 percent, about the same as the 5.4 percent average unemployment during the first half of 1979. Unemployment in the city was 6.6 percent. See Figure 10 .

The OEDP notes that the City of New Haven and the Towns of East Haven and West Haven consistently experience higher unemployment rates than the region as a whole, often running at least two percent higher than the remainder of the region. If the City of New Haven is excluded, the unemployment rate for the LMA drops to 4.8 percent. If both East Haven and West Haven are excluded as well, the rate falls to 4.2 percent. These figures contrast sharply with the unemployment rate in those three central urban areas of 6.5 percent.

Figure 9 : Percentage of Regional Employment by Industry, City of New Haven and New Haven Labor Market Area, 1970

	Total Labor Market Area No. Employees	City of New Haven		Balance of Labor Mkt. Area	
		No. of Em- plo- yees	% of Total Labor Mkt. Area Em- ployment	No. of Em- plo- yees	% of Total Labor Mkt. Area Em- ployment
Total Labor Force	173,899	59,200	34.0	114,699	66.0
Total Employment (all industries)	167,860	56,495	33.7	111,365	66.3
<u>Manufacturing</u>	45,960	14,585	31.7	31,375	68.3
<u>Non-manufacturing</u>					
Construction	9,417	2,728	29.0	6,689	71.0
Transportation	5,646	1,734	30.7	3,912	69.3
Communications, utils.	6,740	2,109	31.3	4,631	68.7
Wholesale trade	7,360	2,072	28.2	5,288	71.9
Retail trade	25,460	7,551	29.7	17,909	70.3
FIRE <sup>a</sup>	8,224	2,245	27.3	5,979	72.7
Services	49,288	20,480	41.6	28,808	58.5
Pub. Admin./Gov't.	6,982	2,231	32.0	4,751	68.1
Other	2,783	760	27.3	2,023	72.7

a. Finance, insurance and real estate.

Figure 10  
NEW HAVEN LABOR MARKET AREA  
LABOR FORCE DATA - BY PLACE OF RESIDENCE  
JUNE 1979

	<u>LABOR FORCE</u>	<u>EMPLOYMENT</u>	<u>UNEMPLOYMENT</u>	
			<u>Number</u>	<u>Percent</u>
<u>New Haven Area</u>	<u>211,072</u>	<u>199,794</u>	<u>11,278</u>	<u>5.3</u>
Bethany	2,174	2,078	96	4.4
Branford	11,318	10,809	509	4.5
*Clinton	5,530	5,374	156	2.8
East Haven	12,893	12,068	825	6.4
Guilford	7,688	7,472	216	2.8
Hamden	25,599	24,255	1,344	5.3
Madison	6,447	6,274	173	2.7
New Haven City	64,490	60,258	4,232	6.6
North Branford	5,954	5,714	240	4.0
North Haven	11,809	11,248	561	4.8
Orange	7,054	6,713	341	4.8
Wallingford	18,868	18,161	707	3.7
West Haven	27,164	25,414	1,750	6.4
Woodbridge	4,084	3,956	128	3.1
 LMA without New Haven	 146,582		 7,046	 4.8
LMA without New Haven, East Haven or West Haven	106,525		4,471	4.2
New Haven, East Haven, and West Haven	104,547		6,807	6.5
<hr/> *Not included in "New Haven Area" as designated by EDA				

Source: Connecticut State Labor Department; New Haven Area Overall Economic Development Program, 1979-80.



Employment and Industry Projections. Total employment in the New Haven LMA is expected to increase over the next five years by 8,870, 4.6 percent over estimated 1980 levels, according to projections contained in the OEDP report. See Figure 11.<sup>6</sup> This represents more than two and one-half times the increase in employment experienced by the LMA during the 1974-1979 period, when employment growth was only 3,450 or 1.8 percent.

Manufacturing employment is projected to increase by over 1,300 jobs, but the manufacturing sector is expected to continue to decline in proportion to other industries in the region from 23.3 percent of employment in 1980 to 22.9 percent in 1985. Manufacturing industries projected to experience significant growth are fabricated metals and electrical and transportation equipment, currently the largest factory groups in the area. The report notes, however, that the increases will not so much expand the overall economy as help it recover from depressed conditions of recent years. While they will contribute to making up for past employment losses in their respective categories, they will not be of sufficient magnitude to spark significant population growth.

Most of the projected gains are to occur in the service sector -- an expected increase of over 3,600 jobs. Wholesale and retail trade are projected to provide the second largest share of the increase, with 1,040 and 1,600 new jobs, respectively. Finance, insurance and real estate are projected to increase by 980 jobs. Interestingly, the government sector is projected to experience a slight loss of two percent -- 150 jobs -- between 1980 and 1985.

No employment or industry projections were readily available for the City of New Haven. If the City were able to capture the same proportion of the projected increases in employment as it now has in each industrial sector, employment in the City would increase by about 3,000 jobs between 1980 and 1985. Given the trends in New Haven's manufacturing sector, however, this is not a likely prospect. It does

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6. These projections are apparently from the Connecticut State Labor Department.

Figure

Preliminary

**MANPOWER PROJECTIONS PROGRAM**  
**NEW HAVEN, CONNECTICUT LABOR MARKET AREA**  
**TABLE 1. TOTAL EMPLOYMENT BY INDUSTRY**

Industry	<u>1974</u>		<u>1979</u>		<u>1980</u>		<u>1985</u>	
	Number	Pct.	Number		Number	Pct.	Number	Pct.
*Total Employment	188,020	100.0	191,470	100.0	193,070	100.0	201,940	100.0
Manufg. Employment								
(ex.domestic)	186,150	99.0	189,850	99.2	191,490	99.2	200,420	99.2
Manufacturing	48,610	25.8	44,620	23.3	44,930	23.3	46,260	22.9
Apparel & Leather	3,900	2.1	3,570	1.9	3,530	1.8	3,350	1.7
Printing & Publ.	3,260	1.2	3,450	1.8	3,460	1.8	3,550	1.8
Chemicals	3,380	1.8	3,420	1.8	3,410	1.8	3,630	1.8
Rub. & Misc. Pl. Prod.	2,760	1.5	2,320	1.2	2,340	1.2	2,390	1.2
Primary Metals	5,200	2.8	4,960	2.6	4,950	2.6	4,960	2.5
Fabricated Metals	8,970	4.5	8,360	4.4	8,570	4.4	9,010	4.5
Machinery	3,200	1.7	3,510	1.8	3,500	1.8	3,490	1.7
Elec. & Trans. Eq.	9,130	4.9	7,780	4.1	7,860	4.0	8,390	4.2
Other Manufacturing	8,810	4.7	7,250	3.8	7,310	3.8	7,490	3.7
Nonmanufacturing	137,540	73.2	145,230	75.8	146,560	75.9	154,160	76.3
Construction	9,980	5.3	9,180	4.8	9,270	4.8	9,450	4.7
Trans. (Incl. R.R.)	6,990	3.7	7,080	3.7	7,060	3.7	6,910	3.4
Comm. & Utilities	7,790	4.1	8,220	4.3	8,250	4.3	8,730	4.3
Trade	39,050	20.8	41,660	21.6	42,140	21.8	44,780	22.2
Wholesale	10,590	5.6	10,650	5.6	10,780	5.6	11,820	5.9
Retail	28,460	15.1	31,010	16.2	31,360	16.2	32,960	16.3
Fin., Ins. & R.E.	9,510	5.1	10,360	5.4	10,520	5.4	11,500	5.7
Service	57,060	30.4	60,670	31.7	61,260	31.7	64,880	32.1
Government	7,160	3.8	3,060	1.2	3,060	1.2	7,910	3.9
Agricultural Employ.	1,870	1.0	1,620	0.8	1,580	0.8	1,520	0.8

1  
 Totals in this table may agree with those in other tables based on the wage and salary concept. Also, workers are counted in the industry by the type of work they do rather than in the industry they are actually employed.

Source: New Haven Area Overall Economic Development Report,  
 New Haven, 1979. Exhibit IIB.

. 1979-80, Office of Economic Development,

bode well for the city, however, that the largest increment in employment is expected in the services sector, the only sector in which the city has historically held its own relative to the suburban employment picture. Whether the city will be able to capture proportionate amounts of the projected increases in the other major growth sectors, especially retail trade, is problematical.

To a large extent the city's future economic health will be dependent upon the aggressiveness and the ultimate success of its efforts to implement the comprehensive revitalization program it has developed. Conference-convention business, office construction, entertainment, cultural and tourism activities, downtown housing rehabilitation and commercial facilities, as well as support of the activities linked with its key employers, Yale University and the Yale-New Haven Medical Center, are the major elements.

#### D. Implication of the Trends.

There is no certainty that these expectations for the future will come to pass. There have been cases in this country where declining population has been arrested and trends reversed by major stimuli to economic development, such as natural resources exploitation, creation of new industries or technologies or new markets for old ones. Yet we have very little experience with altering trends in situations of essentially "no-growth" or actual decline over an extended period.

Studies of long-term trends in community population change have shown that stability is the "least stable" characteristic observable among American communities.<sup>7</sup> Only one percent of the nation's 19,000 communities for which data were tabulated over a 20-year period maintained stable population throughout the 20-year period. Places that were stable for ten years were as likely to decline as to begin growing again. This means that public policies -- and more important, public action -- can make a significant difference, especially where strengthening of a community's economic base and improving amenities are concerned.

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7. Carson, J., Rivkin, G. and Rivkin, M., Community Growth and Water Resources Policy, Praeger Publishers, New York; 1973.

The point is that here in the New Haven region -- as in a number of similar situations nationwide -- the future pattern of urban development seems to be very much a matter of the strength and consistency of public policy. It appears the area could stabilize if local, state and Federal policies to arrest urban decline and suburban sprawl find their way into implementing actions that reinforce each other. The sprawl could continue, however. New investment could by-pass a generation of maturing suburban areas just as it by-passed the central cities during their own growth periods. The results would be obsolescence and decay like that observed in the central city earlier. Urban revitalization efforts could be undermined seriously if decision-making follows in cumulative fashion the lines of past "business-as-usual".

#### IV. RETAIL ACTIVITY AND DEMAND, SOUTH CENTRAL CONNECTICUT REGION

As of 1977, the South Central Connecticut Region<sup>8</sup> encompassed a market area of 521,700 population, with gross income of \$3.063 billion. Recorded sales in that year for the shopping goods types of retailing chiefly associated with regional shopping centers and central business districts<sup>9</sup> were \$465,870,000. Sales in the convenience goods categories of eating and drinking establishments and drugstores were \$218,620,000. On a per capita basis, these sales were approximately \$910 and \$540, respectively (10 percent and 40 percent higher than the average for Connecticut as a whole).

Within this region trade patterns seem to distinguish three market sub-areas. (See Figure 12.)

There is the group of four cities and towns that share boundaries with New Haven and, together with the central city, make up New Haven's primary trade area: West Haven, Hamden, North Haven and East Haven. Reportedly 80 percent of New Haven's retail sales are made to residents of these five communities. In 1977 the primary trade area had 52 percent of the region's population and 48 percent of the region's gross income. It did about 50 percent of the region's shopping goods business and had 57 percent of the region's sales in the restaurant, bar and drugstore categories. (See Figure 13.)

A secondary trade area for New Haven consists of six towns to the east: Wallingford, North Branford, Branford, Guilford, Madison and Clinton. These towns are, for the most part, less densely populated than the primary trade area. With 21.7 percent of the region's income and 23.3 percent of the gross income, they had somewhat over 11 percent of the shopping goods sales volume for the region and a little over

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8. The SCCRPA planning area includes New Haven SMSA (except for the Town of Clinton) Meriden SMSA (coterminous with the City of Meriden) and Milford (the easternmost community of Bridgeport SMSA).

9. Include general merchandise, apparel and accessories, furniture and home equipment and miscellaneous shopping goods (GAF), also referred to as Department Store Type Merchandise (DSTM).

Figure 12. South Central Connecticut Region Market Sub-Areas

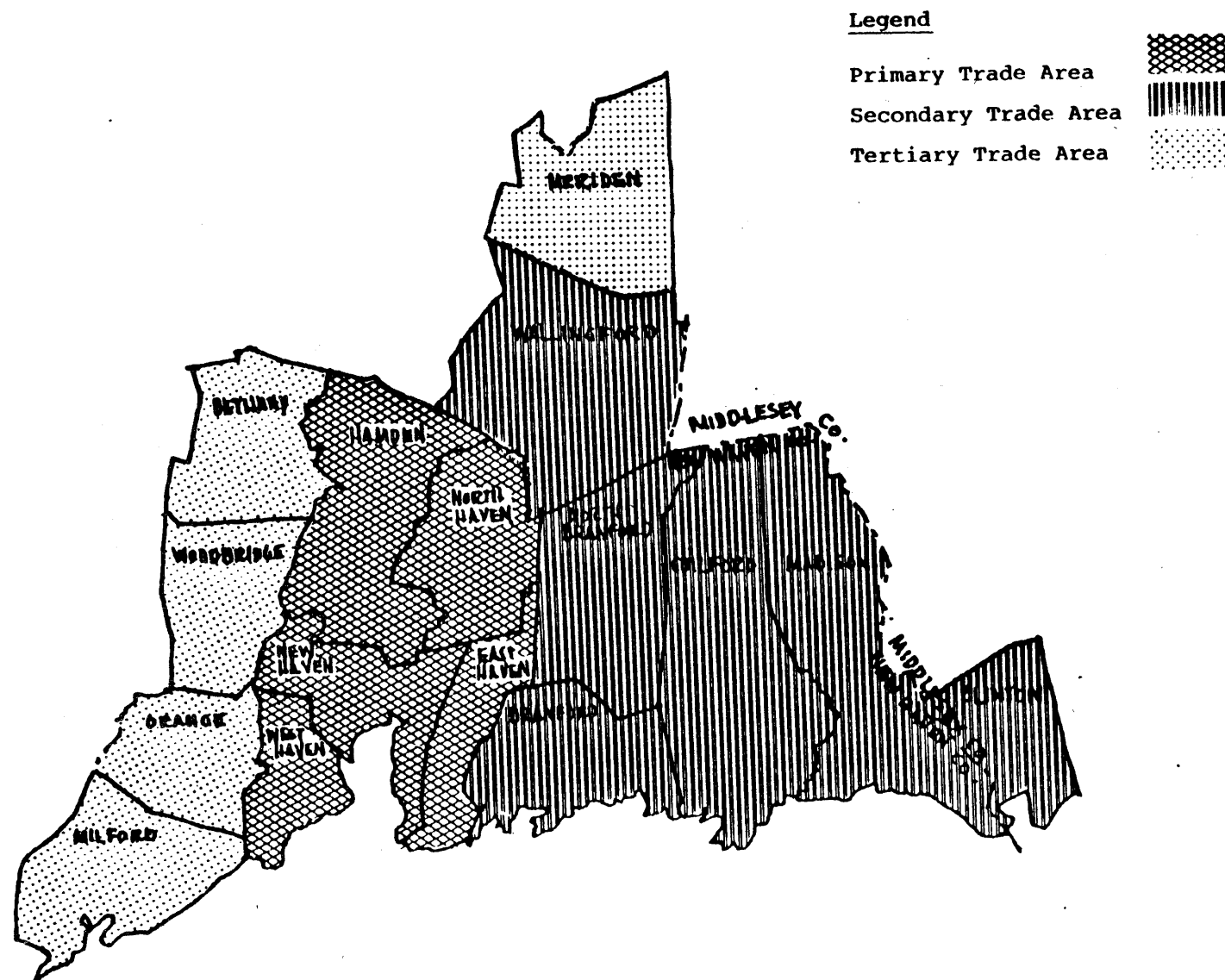


Figure 13. Comparison of Market Sub-area Population, Income, Shopping Goods and Selected Convenience Goods Sales for 1977.

	<u>Population</u>		<u>Gross Income</u>	<u>Shopping Goods Sales<sup>a</sup></u> (DSTM or GAF plus Misc. Shopping Goods)			<u>Restaurant, Bar and Drugstore Sales</u>		
	<u>#</u>	<u>% of Total</u>	<u>% of Total</u>	<u>(\$000)</u>	<u>% of Total</u>	<u>% of Gross Income</u>	<u>(\$000)</u>	<u>% of Total</u>	<u>% of Gross Income</u>
<u>Primary Trade Area</u> New Haven City, West Haven City, East Haven, North Haven, Hamden	272,570	52.2	48.2	238,325	51.2	16.0	124,610	57.0	8.2
<u>Secondary Trade Area</u> Branford, North Branford, Guilford, Madison, Wallingford, Clinton	113,017	21.7	23.3	53,645	11.5	7.0	42,200	19.3	5.8
<u>Tertiary Area</u> Meridan City, Bethany, Woodbridge, Orange, Milford	136,125	26.1	28.5	173,900	37.3	19.5	51,810	23.7	5.8
<u>Regional Total</u>	521,712	100.0	100.0	465,870	100.0	15.2	218,620	100.0	7.2

Sources: U.S. Census, Current Population Reports, Series P-25#820, November 1979; Computer tabulations for Current Population Reports to be published June 1980; 1977 Census of Retail Trade Geographic Area Series, RC 77-A-7; Rivkin Associates, Inc.

- a. General merchandise, apparel and accessories, furniture and home furnishings and miscellaneous shopping goods.

19 percent of the convenience business in the categories cited above.

The third group of communities includes Meriden to the north and four communities to the west: Bethany, Woodbridge, Orange and Milford. Meriden is an SMSA with 11 percent of the region's 1977 population, a little over 10 percent of the income. Milford is part of the Bridgeport SMSA and is comparable to Meriden in size and income, both close to 10 percent of the regional total. The other three towns constituted 5.1 percent of the population and 8 percent of the area's gross income. Orange alone had 12.5 percent of the shopping goods sales for the region. Meriden's and Milford's shares were comparable with that of Orange, 12.3 and 12.5, respectively. The combined restaurant, bar and drugstore sales for this tertiary market sub-area amounted to almost 24 percent of the region's total. This pattern of sales reflects relatively higher family incomes characteristic of the communities west of New Haven as well as the considerable development of active retail facilities there.

To the northwest of the SCCRPA area are the peripheral communities of the Waterbury SMSA. Lacking the express highway connections with the New Haven SMSA that the other peripheral communities share, these towns are more closely integrated with the Waterbury area. They are therefore excluded from the area under study here.

#### A. Major Retail Centers

The two largest retail centers in the region are in the primary trade area: downtown New Haven with close to 1.2 million square feet and the concentration of shopping centers and stores in Hamden which total almost a million square feet. The Hamden complex of retail facilities includes Hamden Plaza, Hamden Mart and its extension and the stores on Dixwell Avenue from Connelly Parkway to Shepard Avenue.

New Haven's CBD had \$78.5 million sales in department store type merchandise. Hamden's retail complex, \$51.6 million. The suburban character of the Hamden complex sets it quite apart from downtown New Haven, however. Sales figures reflect the greater emphasis on



shopping goods over convenience goods downtown (80 percent as opposed to 19 percent). In Hamden shopping goods make up a little over half the total business; and convenience goods, almost a third.

Downtown New Haven. Halcyon Ltd. of Hartford, New Haven's market analyst, describes five "clusters" that comprise the downtown retail complex:

Chapel Square Mall, a 600,000 square foot development anchored by Malley's (150,000 square feet) and R.H. Macy (250,000 square feet) plus 150,000 square feet on two levels of a mixture of locally owned stores and some national chain stores offering an inexpensive to mid-range of merchandise;

Upper Chapel Street, a higher priced area focussing on fashion and ready-to-wear goods for a youth market;

Lower Chapel Street, a marginal area characterized by discount stores and high vacancy rate;

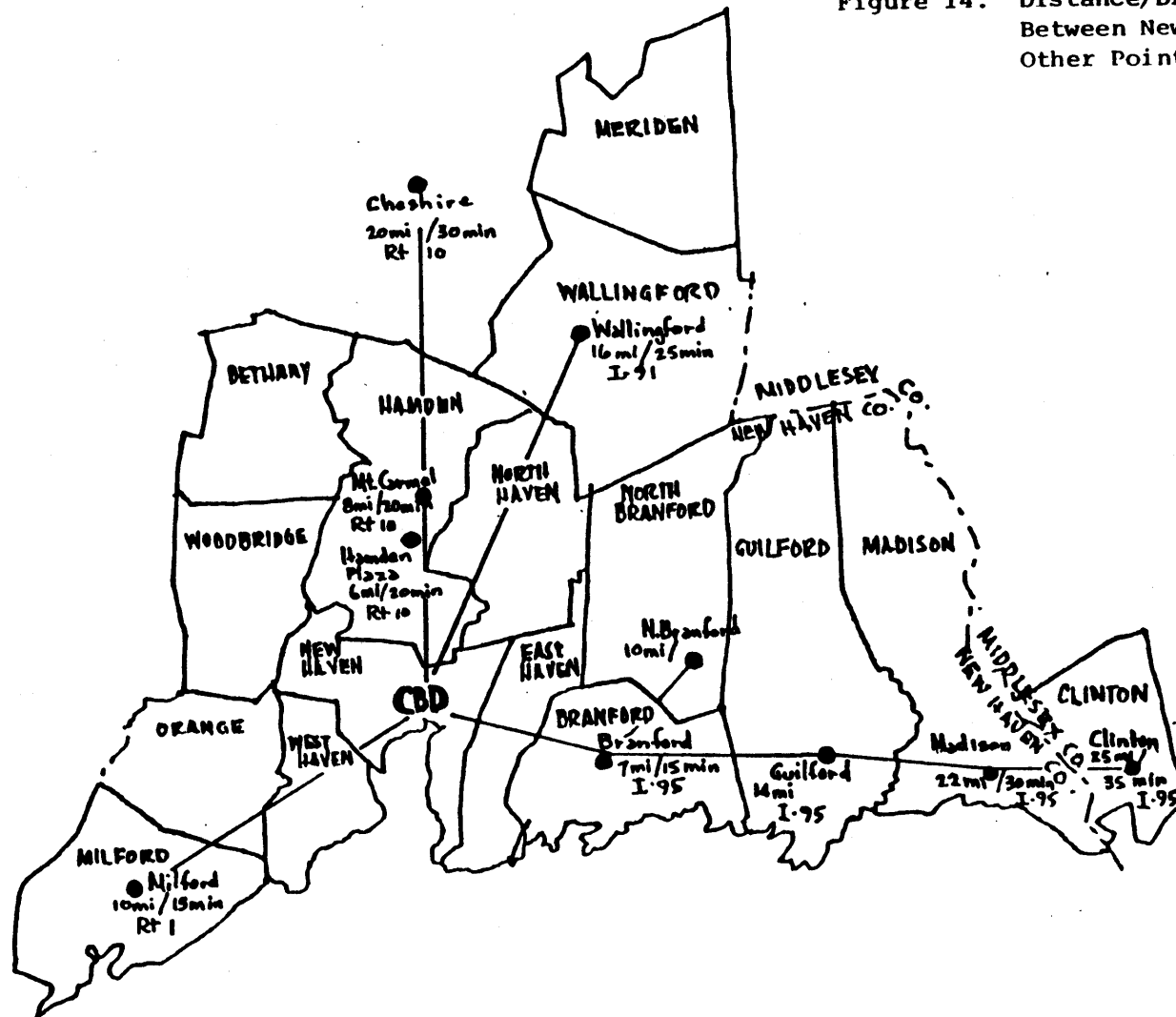
Upper Orange Street, a more expensive fashion and furniture district undergoing some transition; and

Lower Orange Street, a mixture of wholesale and retail businesses with some concentration of kitchen equipment but mostly non-shopping goods.

Combined, these clusters constitute the largest single group of retail facilities in the region, unmatched in respect to variety of merchandise and span of price range for comparison shopping. They are highly accessible within the region. Driving time and distances between the CBD and various parts of the regional trade area are shown in Figure 14. CBD retailing is buttressed by the presence nearby of the region's largest concentration of business offices, medical facilities, government agencies and services, and the 30,000 workers these offices draw into the downtown each day.

Altogether, the downtown stores captured 17 percent of the region's shoppers goods sales in 1977. Establishments elsewhere in New Haven attracted another 10 percent of the regional market for these merchandise

Figure 14. Distance/Driving Time  
Between New Haven CBD and  
Other Points in the Region



groups. The total central city share was, thus 27 percent of the area-wide total, exceeding its 24 percent of the region's population and 20 percent of the region's gross income.

Hamden. The Dixwell Avenue complex in Hamden includes two shopping centers:

Hamden Plaza, a 1955 development formerly anchored by J.C. Penney (30,000 square feet) with 37 additional stores totalling 300,000 square feet plus 2,300 parking spaces; and

Hamden Mart, a center which has more than doubled its original 300,000 square feet in the twenty years since it opened. Included within its total associated area are a Sears Roebuck (180,000 sq.ft.), Sears Auto (30,000 square feet), Bradlees (40,000), Caldors (45,000), Howlands (15,000) plus a Food Mart (25,000), Shop Rite (23,000) and a Stop and Shop (25,000) and 29 other stores.

Dixwell Avenue retailers accounted for 11.1 percent of the region's shopping goods trade. Establishments in the rest of Hamden raised total sales for the town in these categories to a level half again higher.

Secondary trade area. Within New Haven's secondary trade area, Wallingford was somewhat stronger than the other communities, with about half the shoppers good sales in 1977. The few shopping centers in this area can be characterized as primarily oriented to local convenience or tourist trade. Recorded sales for the entire group of six communities amounted to 12 percent or so of the region's total.

Tertiary trade area. The tertiary area may be the source of some sales in New Haven and its immediate vicinity but it clearly has strong market attractions of its own. Among these Meriden Square and the nearby stores along Lewis Avenue from Route 66 to Kensington Avenue are the largest. Together they did a \$37.758 million shopping goods business in 1977. This is their main strength also, the GAF fields constituted 92 percent of their trade. They also dominate Meriden's CBD which is very much smaller, and had scarcely \$6 million in 1977 shopping goods sales.

Meriden Square, is a regional mall of 546,000 square feet anchored by a 160,000 square foot J.C. Penney and a 130,000 square foot G. Fox. There are 53 additional stores including a number of nationally recognized chains, and 2,800 parking spaces. Although Meriden Square does not have direct access from I-91 (the New Haven-Hartford Interstate Highway link), it does have access via Route 66 and it does appear to draw customers from Hamden and North Haven and even from New Haven, 20 miles to the south.

Milford has a CBD with a level of business on the scale of Meriden's, between \$5 and \$6 million. Like Meriden's it is almost completely dominated by suburban retail development. In the case of Milford the main suburban shopping facility is the Connecticut Post Shopping Center, on Interstate Highway 95, built about 20 years ago, and soon to be upgraded by the Rouse Company. Physically, this is the largest single suburban shopping center in the New Haven area, with 800,000 square feet and 5,300 parking spaces. The mix of stores and a number of vacancies, however, account for almost 40 percent of its business going into the convenience goods categories. Consequently, its place in the region's shopping goods fields falls behind New Haven, Hamden and Meriden Square. The Connecticut Post Center, together with the nearby stores along the 1200 and 1300 blocks of the Boston Post Road had a DSTM sales volume of \$17.7 million in 1977.

Anchor stores at the Connecticut Post Shopping Center are a 200,000 square foot Alexanders, a 20,000 square foot Kresge, a 25,000 square foot Stop & Shop and a 45,000 square foot Caldor. In addition there are about 50 other stores including a double movie theatre, some national chain stores and an Uniroyal Home & Auto Center. The Rouse Co. has announced plans to renovate this facility and expand it to a million square feet within the near future.

Finally, there are two shopping centers on Route 1 in the town of Orange which do a considerable amount of GAF business themselves as

well as attract customers to nearby establishments along Route 1.

Whiteacre Shopping Plaza, a 252,000 square foot development anchored by Sears (150,000) and a Sears Auto Center (30,000), Marshalls (25,000) and a Stop & Shop (25,000) and including seven other stores such as Medimart, Thom McAn, Radio Shack and Friendly Ice Cream; and

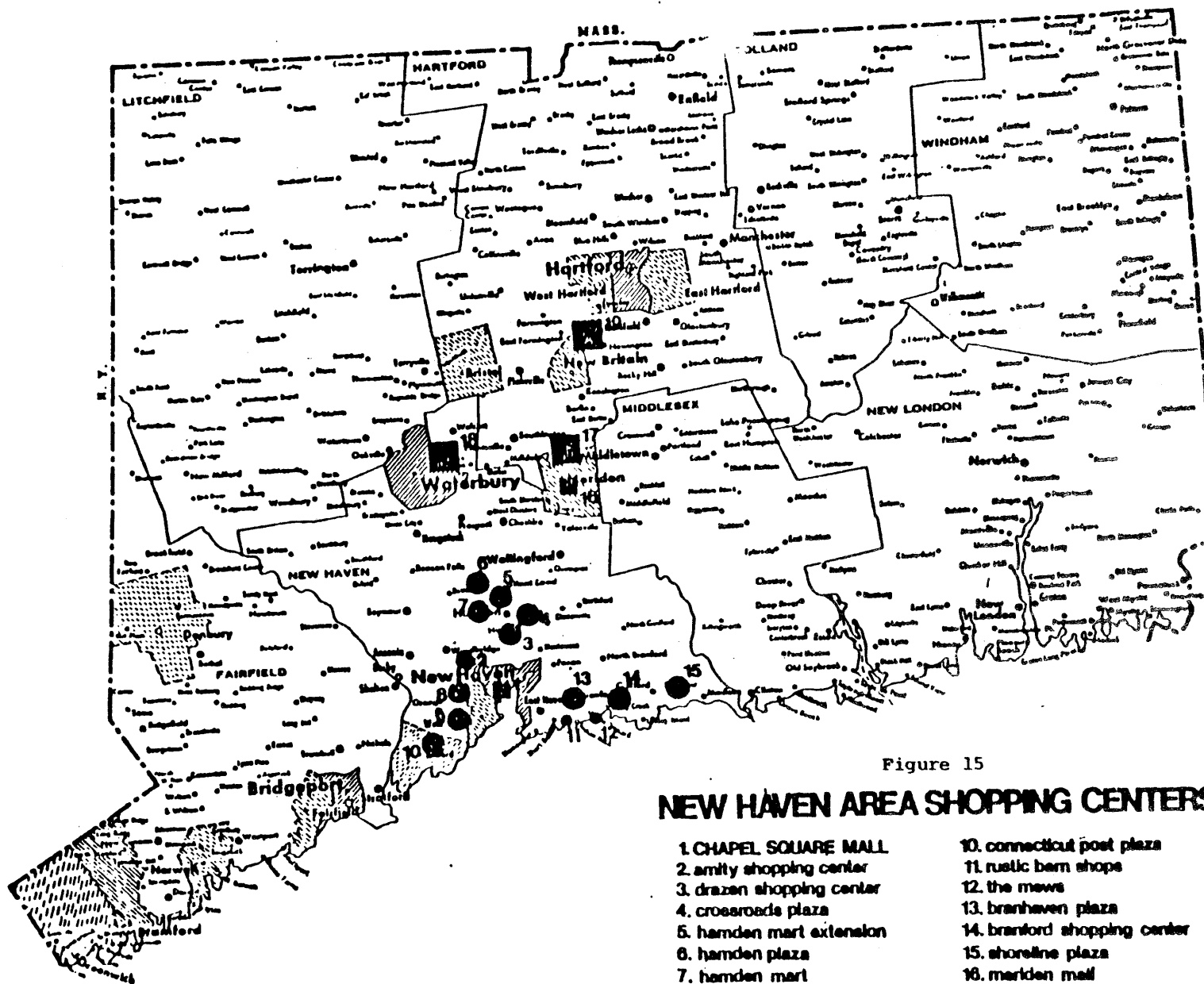
Loehmann's Plaza, 65,000 square feet built in 1977 with somewhat over 300 parking spaces, a Loehmann's (discount high style women's clothing) and 17 other establishments.

The Census of Retail Trade recorded between \$50 and \$60 million in shopping goods trade for Orange in 1977.

The geographical positions of these facilities are shown in Figure 15. The locations of several local convenience-oriented shopping centers in the vicinity of North Haven are indicated also, as are several of the larger (500,000 square feet and over) regional malls beyond the periphery of the South Central Connecticut Region trade area. The Naugatuck Valley Mall near Waterbury (500,000 square feet which, together with the stores in its vicinity did \$71.8 million in shopping goods business in 1977) and the West Farms Mall<sup>10</sup> between New Britain and Hartford (which together with the developments immediately surrounding it, had GAF sales on the order of \$119 million in 1977). These malls are about 35 and 40 miles away from New Haven. Other super-regional shopping facilities offering comparison shopping opportunities of a million square foot scale and similar variety are "White Plains, New York (60 miles away) and a new mall under development in Stamford (50 miles to the southwest).

Even though there is no super-scale regional facility with three or more department stores and over a million square feet within the South Central Connecticut Region, there is a wide variety of department stores represented within a 20 mile radius of the heart of the region. These include R.H. Macy and Malley's in New Haven, Sears and Gimbels

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10. West Farms will be expanded from its original 1 million plus square feet to about 1.3 million square feet with the planned addition of another anchor store and a number of smaller shops.



Source: Halcyon Ltd. An Analysis of Market Potentials, New Haven Central Business District, October 1978.

## Figure 15 NEW HAVEN AREA SHOPPING CENTERS

1. CHAPEL SQUARE MALL
2. amity shopping center
3. drazen shopping center
4. crossroads plaza
5. hamden mart extension
6. hamden plaza
7. hamden mart
8. whiteacre plaza
9. loehmanns plaza

10. connecticut post plaza
11. rustic barn shops
12. the mews
13. branhaven plaza
14. brantford shopping center
15. shoreline plaza
16. meriden mall
17. meriden square
18. naugatuck valley mall
19. west farms mall

regional malls 
 malls 
 shopping centers

in Bridgeport, Alexanders in Milford, Sears in Orange and Hamden, J.C. Penney in Meriden, G. Fox also in Meriden, and Caldor. Bradlees, Kresge and Howland distributed among these various centers as well.

Two sources estimated the regionwide total amount of space in retail facilities mainly devoted to comparison shopping (i.e. shopping centers plus the New Haven CBD) at 4.25 to 4.7 million square feet.<sup>11</sup> Neither includes space in freestanding or miscellaneous stores or in DSTM establishments located in predominantly local convenience types of shopping facilities. When all the available retail floor space in the region is considered, areawide sales on a per square foot basis amounted to well under \$100 dollars in 1977. While this is by no means an indicator of overbuilding or financial trouble for retail facilities built in the 1950s and 1960s or earlier, it is certainly not a promising augury for new shopping center construction that seems to be requiring sales levels on the order of \$110 per square foot of display floor space.

Although regionwide sales on a per capita basis have been running somewhat above the statewide average for shopping goods, restaurants and drugstores, there does not seem to be evidence that major segments of the market are underserved at present.

There is, however, evidence that the existing complement of retail facilities built at the height of the era of suburban development have aged. By now they have lost the aura of the fresh and the new which stimulate consumer interest. They lack the elements of excitement and discovery and, for the most part, sophisticated design, that would give well-planned new shopping centers a competitive advantage over them. It may well be that the opportunity to attract attention in the market area with projects newer and bigger and different from the familiar facilities there now is tempting potential developers

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11. Halcyon Ltd. said 4.25 million square feet in their market study for New Haven. SCCRPA's planning director, Norris Andrews, estimated the larger figure.

more than any real lure of unsatisfied market demand or anticipated future growth. Herein lies the challenge to both public and private sector entities who have an interest in the continued viability or conservation of existing retail developments.

#### B. Retail Development Proposals

A number of proposals have been put forward for retail development in the greater New Haven trade area. Two of these -- the mixed-use Chapel Square - College Street project of the City of New Haven and the expansion/refurbishing of the Connecticut Post Shopping Center in Milford by the Rouse Company -- involve upgrading and building on to existing shopping developments.

Three proposals for new shopping centers, besides the North Haven Mall project, have also been publicized.

Chapel Square - College Street Project. This project is part of a comprehensive downtown revitalization effort by the City of New Haven with broad-based support from the community. It involves conversion of the old, landmark Taft Hotel into almost 200 apartments, renovation and reopening of the old Shubert Theatre and another, infill office and commercial construction, and rehabilitation of some existing buildings. Retail uses on the order of 90,000 square feet, some in renovated structures and some in new, are envisioned in this project. Emphasis here is to be on high quality fashion merchandise and luxury items, retail lines which are not developed in any strength in New Haven now. Physically, the new project is to be tied in with the existing Chapel Square Mall. Sketch designs, implementation plans and feasibility studies are in preparation by the City for submission to the Department of Housing and Urban Development by Summer 1980. New Haven is seeking UDAG (Action Grant) funds from the Federal Government to assist with this project.



Connecticut Post Shopping Center. The Rouse Company is planning to add approximately 200,000 square feet to its Connecticut Post development in Milford. This will bring the total area of the project to a million square feet and add at least one department store. This project is acceptable to New Haven since its objective is to upgrade a present facility rather than to build one which is wholly new.

Three other large scale shopping center proposals have been opposed by the City and the Regional Planning Agency, however. Their shared concern is for conservation of existing facilities in New Haven and elsewhere in the region, a goal which they believe will be seriously undermined if new super-regional malls are built. These proposals are:

Orange Mall, an 800,000 square foot project proposed for Orange at the interchange of I-95 and March Hill Road. This would be a high fashion development with a Lord and Taylor and Bloomingdales. The Cinema 1-2-3-4-5 is located at the interchange and already contributes to periodically severe traffic congestion there. The project appears to require a sewer connection through West Haven. Because of West Haven's refusal to allow the sewer hook-up and the multitude of conditions placed on approval of the developer's application by the Town of Orange, it appears that this proposal may have been withdrawn.

Hi-Ho DiDario Plaza, is a million square foot shopping center combined with a 250-bed hotel, small convention center, office building and skating rink just off the Milford Parkway Connector which links the Merritt and Wilbur Cross Parkways with I-95. This project would require access to the Milford Parkway Connector, which may not be granted. Expansion plans for the Connecticut Post Mall (two miles away) and proximity to the Trumbull Shopping Center (five miles away) may be additional factors in bringing about the eventual abandonment of this proposal also.

Branford Mall was a proposed project of 2.5 million square feet in the Town of Branford. Environmental impact problems may have been among the factors that have led to the demise of this project. Reportedly the developer is now talking about a big, new mall on a site only two miles from Meriden Square.

At the moment it seems that North Haven Mall is the only really active proposal for large-scale retail development. Its status has been discussed in Section II above. Its fate could influence what happens with the other proposals. Given current economic conditions within the New Haven trade area, it is hard to imagine more than one of these super-regional malls within the trade area actually being followed through to realization.

#### C. Regional Market for Additional Retail Space

Regrettably the detailed market analysis and impact studies for the North Haven Mall project which are being prepared for inclusion in the environmental impact statement will not be available until some months after this present study must be completed. Another analysis of the Mall's market impacts is being made by personnel of the South Central Connecticut Regional Planning Agency. SCCRPA's study will also not be ready in time for inclusion in this assessment of community impacts.

In order to avoid duplicating these ongoing efforts, both of which can be elaborate and precise, we have adopted a fairly simple approach to gauging the regional retail market. Our estimates are based on a few assumptions and can be easily altered as more refined data are produced by the subsequent studies.

These assumptions are as follows.

1. The 1985 and 1990 population levels forecast for the regional trade area by the Connecticut Office of Policy and Management in February 1980 will be realized. These are shown in Figure 3 . For the SCCRPA region plus the Town of Clinton (New Haven SMSA, Meriden SMSA, and Milford) population is projected to reach a level of 539,040 by 1985 and 546,980 by 1990.

These figures would mean a 1977-85 increase in population of 3.3 percent and 1977-90 increase of 4.7 percent.

2. Gross income for the region will grow at a rate that enables it to keep pace with inflation. This is an optimistic assumption.<sup>12</sup> It implies that any losses of jobs in one sector, for example, manufacturing, will be made up for by expanded opportunities to earn livelihood in other sectors. It implies also that existing enterprises will be able to raise salary levels so that employees will experience no decline in standard of living over the years to 1985 and 1990. Finally, it means that it is unnecessary to adjust all our figures for inflation. We can discuss all the findings in terms of constant 1977 dollars.

3. Aggregate sales of department store type merchandise in relation to gross income for the region will remain at the 1977 level of 15.2 percent. This is also an optimistic assumption, for it implies that other household expenditures, for example fuel or medical care will not take a rising proportion of earned income so that less is available for retail purchases of shopping goods, and that the sales attributable to tourists will similarly resist erosion by the effects of inflation on such expenditures.

In 1977 gross income for the New Haven regional trade area was \$3.063 billion. Given the foregoing assumptions, gross income within the region will be (in 1977 dollars):

in 1985,  $1.033 \times \$3.063$  billion, or \$3.163 billion and  
in 1990,  $1.047 \times \$3.063$  billion, or \$3.208 billion

If shopping goods sales in the region are 15.2 percent of gross income they will be (in 1977 dollars):

in 1985,  $.152 \times \$3.163$  billion, or \$480.72 million and  
in 1990,  $.152 \times \$3.208$  billion, or \$487.62 million

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12. Optimistic in light of sluggish growth in the 1970's, limited prospects for economic growth in the foreseeable future and current rates of inflation. However, even if real income grows, say one percent a year, from 1977 to 1985, aggregate income would be \$3.31 billion in 1985. Sales at 15.2 percent of aggregate income would be \$52.3 million or \$36.8 million over 1977 levels, and additional shopping goods space supportable at \$110 per square foot by 1985 would be about 335,000 square feet.

These figures would mean sales increases over the 1977 level of \$465,870,000 of

\$14,850,000 in the years 1977-85 and  
6,900,000 in the years 1985-90, a total of  
\$21,750,000 over the 1977-90 period.

In terms of retail space supportable at \$110 per square foot, this growth in sales would indicate a market for new space on the order of 200,000 square feet regionwide for shopping goods over the next decade, in effect.

Because it may cost substantially less to occupy rehabilitated buildings, the projected market growth, albeit modest, may permit absorption of existing floor space to a somewhat greater extent than 200,000 square feet. Also, growth in restaurant, bar and drugstore sales will absorb space for those convenience goods firms that tend to locate in association with shopping goods establishments. These businesses, together with banks and services such as beauty salons, barber shops and photography studios or travel agencies are among the complement of tenants that frequently occupy shopping centers and downtown retail districts, adding somewhat to the basic demand for shopping goods space.

These qualifications notwithstanding, the regionwide prospects for growth in retailing over the next decade are modest indeed. Given the picture of very slow population growth, rising incomes absorbed by inflation and limited opportunity to broaden the extent of the trade area by attracting customers from underserved areas outside, it is clear that an addition of a million square feet of competitive new shopping center space (amounting, perhaps to 750,000 square feet of selling area) will divert sales from existing retailers in the trade area. The effect will be to hurt other retail developments throughout the entire region.

## V. SOCIOECONOMIC IMPACTS OF NORTH HAVEN MALL

Federal approval of the wetlands fill permit at issue in the North Haven Mall case (by the U.S. Army Corps of Engineers), of funds for improving Bishop Street (DOT) and funds for North Haven's sewerage/sewage treatment system expansion (EPA) will facilitate development of the proposed shopping center. Denial of the fill permit will mean the Mall cannot be built. If the fill permit is granted and Federal financial aid for one or both of the other projects is denied, the Mall project could go forward under funding from other, non-Federal sources. Financing of the street and sanitation projects by state or local sources, by the mall developers or by some combination of these would, in principle, enable the shopping center project to proceed, provided the wetlands fill permit were granted. We do not know certainly that the mall project would be infeasible if infrastructure costs of the magnitude involved here had to be met without Federal assistance. It seems improbable, however, that the proposal would be implemented in its present form given such a situation, or in accordance with its intended construction schedule.

The charge of this present study is to examine whether the proposed North Haven Mall project contributes to, or detracts from, important urban development objectives for the surrounding communities of interest to the Federal Government. It is not our mission -- nor indeed is it possible within the budget and time constraints of this study -- to draw definitive, quantified conclusions about all the shopping center's most significant community impacts. We must reiterate here that other studies now under way will supply additional, more detailed information which should be factored into the analysis. For the present we are limited to fairly generalized, preliminary data and information from interviews with knowledgeable officials in the South Central Connecticut Region and State and Federal offices in Hartford.

The principal impact of the proposed actions leading to development of the proposed North Haven Mall, and the central issue of concern here

from which the other impact issues flow, is that this project will result in the creation of a single facility offering the largest concentration of comparison shopping opportunities in the region. As such, it will have profound impact on the region's retail trade patterns. To the extent that retail trade plays a role in the patterns of land use, employment, transportation, fiscal balance, social exchange and the quality of physical appearance of communities within the region, such a massive project as North Haven Mall will affect these aspects of community life as well.

Another aspect of "environmental impact" here is one which, unfortunately, the NEPA<sup>13</sup> environmental impact statement, with its focus on the individual project and emphasis on the measurable physical and economic environment tends to subordinate unduly. This is the institutional or policy environment. It involves the availability of resources for adapting to adverse community impacts, the process of allocating those resources among various other community needs and the very difficult challenge of effectively aligning those resources with the problems (such as impact mitigation) they are meant to solve.

It involves the place of this specific decision in the cumulative stream of decisions that can affect achievement of long term urban development and energy conservation goals; and it involves the effects of these present actions on public efforts and investments which have already been made.

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13. The National Environmental Policy Act. The Council on Environmental Quality guidelines for the environmental impact statement require that the following matters be addressed:

- i. description of the proposed action
- ii. probable impacts of the proposed action on the environment
- iii. probable adverse environmental effects which cannot be avoided
- iv. alternatives to the proposed action
- v. relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity
- vi. irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented, and
- vii. discussion of problems and objections raised by other Federal, state and local agencies and by private organizations and individuals in the review process and the disposition of the issues involved.

Finally, there are considerations of the North Haven Mall project as a physical entity, with impacts on environment -- natural, man-made and socioeconomic -- that constitute its immediate setting.

#### A. Regional Impacts on Retailing

The assessment of the regional retail market for shopping goods presented in Section IV indicates that, barring unforeseen growth in the area's economy which would increase families' disposable incomes by rates well in excess of current inflation and/or stimulate substantial new population growth, the addition of a new shopping facility of the scale proposed for North Haven Mall can occur only at the expense of existing facilities throughout the trade area.

The new North Haven Mall would become the "central business district" for the region. Downtown New Haven would no longer offer the greatest breadth and depth of comparison retail goods in the region. North Haven's geographically central location, proximity to major transportation arteries, newness and the attraction of twice as many major "anchor" stores as any other shopping facility in the trade area, will give it a competitive advantage in leasing over all the other retail developments now serving the region's consumers.

Retailers will be motivated to locate in the new mall because the larger numbers of stores will generate in a single place a greater volume of customer traffic over all; or in a defensive sense, because their competition is there.

In the absence of a significantly growing retail market, however, there are a number of probable results. One is that businesses will open new branches in the mall, thereby dividing their own market between the different units. Lowered productivity of capital, personnel, and overhead expenditures may then reduce profits, ability to reinvest and quality of service. Prices may be raised as a consequence and/or the firms may be forced to the point of decisions to close the less efficient units.

Some may simply relocate from existing space to quarters in the new mall at the outset.

Diversion of trade away from the existing shopping facilities will lead to a cycle of increasing vacancy rates, diminution of resources for upgrading and consequently even lessened ability to attract trade. The pattern of deterioration is familiar from central city experience and older suburban main streets; and the older generation of suburban shopping centers are not, themselves, immune from it.

Each one of the anchor stores is already represented in the trade area with a store of comparable size to the proposed new one in North Haven -- except G. Fox, whose Meriden Square store is 30,000 square feet smaller than the first stage development in the proposed shopping center. Thus the range and variety of merchandise available within the region will not be appreciably increased by the new facility.

Indeed, prices may even be somewhat higher proportionately because of productivity problems internal to the tenant firms and higher rents in the newly built space.

Even so, it may be argued that for the consumer, a choice among four stores in a single location is a substantial advantage over a choice between two, the latter being typical of the region's existing shopping centers. Savings of fuel and time in covering with a single shopping expedition what currently requires two trips in possibly different directions, is another point that can be made in support of the benefits of the super-regional mall at North Haven. These factors plus the initial excitement and novelty of the new development could be expected to lure many consumers away from their customary shopping patterns.

Severe impacts on existing retail facilities have been variously estimated by different analysts. Halcyon Ltd., New Haven's market consultant, forecast in 1978 when they anticipated the North Haven Mall would have 750,000 square feet, two-thirds the size currently proposed, and its



scheduled opening some time between 1980 and 1985, that the mall would reduce New Haven CBD sales in 1985 to 88 percent their 1977 level. At that time the overall regional market was more optimistically estimated too. Population projections were larger than more recent ones; and predictions that growth in income would outstrip inflation had not yet encountered annual inflation rates in the 10-20 percent range such as we have seen of late. A preliminary estimate by Norris Andrews, Director of the South Central Connecticut Regional Planning Agency, was based on a projected North Haven Mall at the scale currently envisioned. Mr. Andrews' forecast showed downtown New Haven Mall sustaining annual retail sales losses amounting to 27 percent of their 1977 level by 1985 (\$22.5 million); losses of sales in Hamden's Dixwell Avenue shopping centers would be \$10.26 million, or 21 percent of their 1977 level.

Since we do not have information from North Haven's developers on the anticipated trade area for their mall, we can only estimate generally that by 1988 the new shopping center could capture between a fourth and a fifth<sup>14</sup> of the shopping goods sales in the region we have defined in Section IV. Since so little growth is in prospect, losses for existing retail areas might be in a similar range, depending on the relative strength of the groups of facilities, their accessibility to the shopping public and their distance from the new Mall. Smaller free-standing stores, Hamden and downtown New Haven would probably bear the brunt of the losses, although Meriden and other peripheral facilities stand to be seriously affected also. We assume that, because of delays due to environmental reviews and funding for the infrastructure projects on which the Mall development is contingent, the project would not likely open before 1985, possibly later. It would probably take up to three years to become fully rented.

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14. Assuming for 1985: \$110 per square foot x 750,000 square feet; and for 1990: \$150 per square foot of sales area. If real income grows about 1 percent a year, then regional sales levels might be up to point where mall sales would represent a somewhat smaller share -- perhaps 16 percent of the total.

### B. Impacts on North Haven

The Town of North Haven expects the Mall to have largely positive impacts. The site is well shielded from residential areas and therefore visual and physical impacts on neighborhoods would be minimal. Positive fiscal impacts would almost certainly be substantial. Real estate tax revenues would far exceed the cost of public services even with the debt service on the \$2.5 million in bonds committed by the Town for off-site infrastructure improvements to serve the Mall.

Retail sales in the center could have some negative effects on sales in other Town commercial activities, both from direct competition (although individual establishments in the Town with which the center would compete would be very likely to move into the center) and, we believe, as a result of increased traffic congestion on Washington Street, where much of the existing predominantly convenience shopping activity is located. On the other hand, increased traffic on Washington Street and elsewhere in North Haven might have the effect of increasing sales in the largely automobile-oriented existing commercial establishments.

Eventually, presence of the mall would attract other types of commercial development to vacant land in its vicinity, for example, suburban office buildings, restaurants and entertainment establishments and motels. Business and professional services would follow.

The principal negative impacts on North Haven could be the increases in traffic congestion -- on Washington Street, Bishop Street-Clintonville Road, and other related arterials.

Traffic already appears to be a problem in the vicinity of the proposed site, particularly at the hours when shifts change in the nearby industrial development. If the developer makes transportation facility improvements as required by ConnDOT to mitigate mall-generated traffic impacts, the situation may not be severely worsened. Still, however, some congestion may be expected at key locations during certain periods of heavy traffic flow, according to ConnDOT.

Increases in employment as a result of the Mall will be appreciable. These would probably benefit North Haven, Wallingford, Hamden and North Branford for the most part, as full-time and part-time sales and clerical jobs -- of the sorts that typically employ suburban housewives, teenagers and retired people -- would become available to help supplement family incomes. But losses in sales by the Dixwell Avenue shopping complex in Hamden would probably result in employment losses at least balancing the gains in that town due to North Haven Mall. Construction period employment for infrastructure projects as well as the mall itself would likely have temporary benefit to several hundred laborers and skilled tradesman during the pre-operational period. Building generated as a secondary impact of the mall development would likely extend the period of stimulus to this industry for several years after the mall's opening.

#### C. Impacts on New Haven

The probable impacts of the Mall on New Haven have been suggested in several sources. The most direct effect would be that on retail sales in the downtown and other major business areas in the City. Some preliminary estimates of this effect have been discussed above.

Secondary effects of the sales decline would probably include:

- o decline in retail employment in the City. This would probably not be in the same proportion as that in dollar sales, but it would be substantial. Furthermore, it would occur to the greatest degree in the lowest skill and wage groups, who are normally the first to lose their jobs. This group is unlikely to find employment in the new mall because of the difficulty of commuting from New Haven to North Haven for relatively low-paying jobs and because Mall stores will be seeking a suburban image, employing largely residents of the communities surrounding it.
- o a decline in businesses that serve New Haven retail establishments. These would include business services, restaurants and other firms depending on relationships with downtown businesses or their customers (whether or not they have any additional sources of trade as well).

- o loss of the "critical mass" of middle class shoppers who have been shopping in downtown New Haven. Impacts associated with this factor could be losses in the effectiveness of the public transit system -- certainly in any future prospects for increased ridership on which improved service would depend; loss of opportunities to expand the CBD's offerings in the luxury sales and services categories (an area which the City believes bears prospects for further development, but which requires a substantial concentration of business district customers) among others.
- o failure of the City's tax base to expand through investment in commercial property improvements and prospective growth in future earnings, as result of the Mall's encroachment on retail trade and secondary generation of other suburban development. Possible disinvestment in existing commercial areas.
- o negative effects on the Federal Government's investment in revitalizing New Have. This totalled in the first dozen years of the City's Title I renewal program alone over \$300 million (in 1979 dollars). It was the highest sum per capita (\$790) for any American city at that time. The investment in downtown redevelopment, new and improved housing, new community facilities and services, public parking garages and street improvements, plus over \$250 million (1979 dollars) in state and Federal highway funds and millions of dollars in private investment have been committed to renew New Haven and reverse its decline. A central objective of the renewal plan was to make the central city accessible to the wide regional retail market. This was justification for the \$10 million investment in the Oak Street Connector which ties the downtown directly to the Interstate highway system. This was justification also for \$37 million in Federal grants and loans to the Church Street project that rebuilt the core of the retail district over the course of ten difficult years.<sup>15</sup> To some extent, the wave of suburbanization of the 1950s and 1960s has made progress in realizing these goals somewhat slower than had been originally anticipated. Now that retailing in the suburbs appears to have become fairly well saturated, possibilities exist for restoring some growth in the heart of the City. The prospect of North Haven Mall and its potential indirect development impacts, however, would limit these opportunities.

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15. Today's inflation seems to reduce the significance of these sums. Translated to 1979 dollars, Oak Street and Church Street project assistance from the Federal Government would be on the order of \$126 million. In more recent years, almost \$78 million in Community Development Block Grant funds have gone to New Haven.

- o the City's efforts to encourage upgrading of older neighborhood commercial areas including State Street, Whalley Avenue, Dixwell, Grant and Washington Avenues would be negatively affected by development of the Mall.

#### D. Impacts on Other Communities

Establishment of a super-regional shopping center in North Haven would have a depressing effect on shopping goods sales in retail facilities throughout the South Central Connecticut Region, as Norris Andrews' study (cited above) has indicated.

The most directly affected would be commercial areas in Hamden, Wallingford, and Meriden: the Hamden Plaza and Mart-Dixwell Avenue concentration, Meridan Square, and downtown Meriden, and Wallingford.

Neighborhood commercial revitalization programs could be adversely affected as well, for example the Highwood neighborhood project in Hamden. Community development funds currently support this project, with the objective of leveraging substantial participation from local banks.

West Haven has plans for extensive refurbishing of its central business district and main commercial strip along Route 1 in Allingtown with UDAG (Urban Development Action Grant) funding and private investment. East Haven, too, has an ongoing core area commercial revitalization project; and Wallingford has assigned a high priority to early implementation of its own central business district program.

Shifts and changes in the retailing environment resulting from the Mall do not bode well for these smaller, local projects as they face competition in the marketplace for capital and customers.

In other respects, impacts on suburban communities that experience diversion of their retail business by the new mall would be similar to those in New Haven: increasing difficulty in filling vacated space, growing deterioration and lower standards of maintenance and blighting influence on the surrounding neighborhoods.

## VI. ENVIRONMENTAL AND ENERGY IMPACTS

Since consultants under the supervision of the U.S. Army Corps of Engineers are embarking on an eight-to-ten month environmental study, possible environmental effects will not be examined in depth at this time. However, this section raises complex issues related to environmental impacts (based on field observations, interviews with representative State and local officials as well as knowledgeable independent professionals) which the detailed EIS study should explore.

### A. Possible Impacts on the Quinnipiac River<sup>16</sup>

The most obvious of the possible impacts on the river and related shoreline areas will be the increased flood level, and probably flood velocity, which would result from the fill which is the subject of the Corps permit already mentioned. This fill would at the very least, constrict the flow of the river past the site and would probably raise flood levels both at the site and upstream from it. The Quinnipiac has experienced three floods near or beyond the "100-year" level during the past year. Flooding early in 1980 crossed the Wilbur Cross Parkway and reached houses on the westside. Higher flood levels would presumably do some damage in this area. Downstream, effects of the fill are uncertain, but some possibilities would be damage from increased flood velocity, damage in the Quinnipiac Meadows wildlife area, and damage to oyster beds in the lower reaches of the river from increased siltation. Also, water quality downstream from the site could be affected by polluted runoff (e.g., oil, grease, lead) from the center.

The proposed fill would cover some wetland area on the site, but the area appears to be thoroughly disturbed by quarrying activities, with a major part of it in far from a "natural" condition.

There appears to be evidence of archeological resources within the proposed shopping center area. No historic buildings would be directly affected by the fill or the construction of the mall, but there are

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16. These possible effects were described by officials from Connecticut's Department of Environmental Protection, Department of Agriculture and Department of Transportation. (See Appendix).

historic houses along Bishop Street which would be affected by the proposed widening of that street. Application has been made for inclusion of these houses on the National Register.

It should be noted that the proposed fill would probably be necessary for any use of the site involving human occupancy, including light industry, since it floods fairly frequently.

#### B. Air Quality Impacts

There are no data on possible air quality impacts of the mall at this time. These will be developed as part of the environmental study now getting under way. Automobile traffic relating to the mall would contribute a substantial concentration of pollutants in the direct vicinity of the mall, but it is difficult to say how the overall regional impact of the mall would differ from that of automobiles driving to other commercial centers if the mall is not built. It is probable that the mall would result in some auto travel in excess of that if most new regional commerce were to locate in downtown New Haven because of the availability of public transit to the downtown area.

#### C. Transportation Impacts

Changes in automobile travel patterns likely as a result of the mall are noted in the previous section: the mall would probably generate more automobile traffic than new commercial space in downtown New Haven. Moreover, if the mall is built a decline in New Haven's central area retail activity will result. To the extent that ability of the city to support a viable transit system is lessened and service might have to be cut back, this could result in more automobile travel. The EIS can be expected to treat this matter in detail.

There could be substantial local impacts from traffic related to the mall, if built at the scale proposed, with substantial increases of traffic on arterials and probably on some local streets as well. Access to the mall via the Valley Service Road could possibly cause congestion even on an improved Bishop Street-Clintonville Road and Washington Avenue, especially

since traffic patterns related to the mall involve turning movements and potential signalization which will reduce the capacity of some of the major arterials. It can be argued on the other side that location of this mall in a highly accessible site might reduce gas consumption by permitting auto trips to and from it largely on freeways and suburban arterials where the relatively free traffic flow results in somewhat lower fuel consumption and air pollution from automobile exhausts.



## VII. CONSISTENCY WITH PUBLIC POLICY

### A. Federal Policy

By deciding in favor of the actions which would allow the North Haven Mall to come into being, the Federal Government would, in effect, be facilitating significant shifts in the distribution of retailing activity within the South Central Connecticut Region. These shifts would not enhance the relative position of New Haven's central city business district, an objective of massive Federal investment, past and current. Nor would they appear to improve the economic condition of the less well off older suburban jurisdictions in the New Haven area.<sup>17</sup>

North Haven Mall does not seem to bear significant prospects of expanded job opportunities for minorities and the unemployed, except perhaps, to the extent that it stimulates the local construction industry briefly and draws currently unemployed suburban housewives, teenagers, and retirees into the labor force.

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17. With the exception of North Haven.

Only North Haven's fiscal condition and tax base will be strengthened by the proposed mall development. Other communities in the region, including the distressed New Haven-West area will receive no fiscal benefit. Indeed, by suppressing retail growth in the other, surrounding communities, North Haven Mall will more likely have a negative effect on efforts to strengthen their fiscal condition and tax base. There will be no impact on the conservation and revitalization of neighborhoods, particularly blighted neighborhoods resulting from development of the proposed new shopping center in North Haven. And as suggested earlier, there is some preliminary evidence that the proposed development, by aggravating flooding and siltation conditions in the Quinnipiac River Valley, will actually harm park, recreation and natural resources conservation facilities downstream. Further an historic district will receive adverse impacts from street widening to accommodate traffic generated by the mall.

#### B. State Plans and Policies

New Haven Development Administrator Sawyer's letter to Colonel Scheider, of the Army Corps of Engineers, cites state policies set forth in the Governor's Executive Order 20 of March, 1978, which support the economic base of urban areas by encouraging new enterprises to locate in central cities. The mall proposal appears to be in conflict with this policy. Other policies included in the state Conservation and Development Policies Plan, 1979-1982, with which the proposal conflicts are:

- to encourage transportation systems which save energy
- to encourage the use of mass transit
- prevent development of flood plains.

However, the proposed mall site is in an area designated by the plan as an "Urban Growth Area", where development is to be encouraged, and development of the mall is, in general, consistent with the state's economic development goals. On balance, were state funds in support of the mall project involved, they would probably be accorded a low priority under state policy because of the probable economic damage it would do to older urban areas in New Haven, Wallingford and Meriden.

#### C. Regional Policy

The Regional Planning Agency of South Central Connecticut has not, as of this time, taken an official position on the mall proposal. We understand that it has in general been opposed to suburban developments with adverse effects on older city and town centers.

#### D. Local Plans and Policies

Official public policy in the Town of North Haven supports the development of the mall, and the proposal is consistent with the Town Plan to the extent that the site is designated for intensive use. Although the most recent plan (1966) did not anticipate a development of this size, it states that there appears to be no reason for extensive changes in the pattern of commercial areas established by the 1959 plan, which called for industry on this site.

The City of New Haven is clearly on record in opposition to the mall: (See Appendices A and B to this report.) Moreover, New Haven has been making a strong and positive effort to revitalize and expand its central commercial area. Its opposition to suburban mall development is supported by its commitment to action programs.

Other municipalities in the region have not taken official positions on the mall.

## VIII. OPPORTUNITIES FOR MITIGATING ACTIONS

A. Past History of Central City Development Actions

The major thrust of suburban retail development in the South Central Connecticut Region occurred at a time when New Haven was in the midst of one of the most comprehensive and aggressive urban upgrading programs in modern American urban history. At the time New Haven's goal was to create a sound new economic base and physical setting which could restore the city's prospects for future prosperity and growth.

But suburban growth intervened and New Haven's "come back" was dealyed.

We could conjecture that the consequences of suburban development for the older central city might have been worse but for the rebuilding effort that was undertaken. That a program of the intensity and scale of New Haven's failed in its objective to stem the tide is a very sobering consideration for any who would raise high hopes about mitigating impacts of intensive suburban development.

Focusing more narrowly on the retail function itself: that the ten years' struggle, the massive investments and risks involved in bringing the Church Street project to completion should have produced gains so fragile as to be placed in jeopardy by a new mall at the scale proposed for North Haven, raises difficult questions relative to mitigation and the appropriate role of the public and private sector.

Now that suburban retailing facilities have been established throughout the region, there could be an opportunity for New Haven to work toward realizing its long-deferred goal of expanding and reinforcing its regional position in retailing. Creation of a super-regional center on a scale to rival the CBD retailing complex would limit and or negatively affect that opportunity.

### B. Current Programs with Mitigation Potential

New Haven's impending UDAG application for the Taft Hotel-Shubert Theatre renovation project can be expected to contribute to the city's economic development. Should the North Haven Mall project be built, New Haven would be better off with the UDAG supported project than without. Nevertheless, as the foregoing assessment of impacts has indicated, it appears that the beneficial prospects of this project would be lessened were overall downtown retail trade to fall off. Similar considerations apply in the case of the "Ninth Square" project, a scheme for renovation and re-use of downtown loft buildings and residential in-fill construction. Community development Block Grant funds might have mitigation potential.

Similarly, projects either in the planning stages or under way to rehabilitate depressed commercial districts in Hamden (with Community Development Block Grant support), West Haven (an applicant for UDAG funding), East Haven and Wallingford can be considered forms of mitigation for the impacts of earlier shopping center development, without further burden of new adverse impacts.

### C. Additional Possibilities for Mitigation

Some of the stronger existing suburban shopping centers may have less difficulty than the others in finding replacement tenants for those lost to North Haven Mall. By subdividing the larger vacant spaces for occupancy by multiple smaller tenants, and by shifts in the mix of tenants, e.g. to include more service businesses, professional office uses, adjunct recreational and entertainment facilities, and convenience goods stores, they may be able to fill their space eventually.

In some places construction of multifamily housing near to the shopping center site enhances its immediate neighborhood market potential. Elsewhere re-uses for the entire site -- other than retail -- might be found.

Assistance programs for physical renovation or parking lot improvements might help some of the other centers attract new tenants; and individual businesses might receive assistance, e.g. from the Small

Business Administration, to spruce up their operations.

So far as Federal aids are involved, however, the "targeting policy" currently in effect would mean that priorities for such funds as will be available would go to communities or parts of communities suffering the greatest distress. The suburban communities which have been relatively better off would have some wait before getting assistance.

D. Implications of the No-Build or Scaled-Down Mall Alternatives

Mitigation of the impacts of major retail shifts resulting from the mall will be very difficult. There is much evidence in the New Haven area as elsewhere in the country of the lingering effects of change like that which a large mall would engender by diverting substantial business and tenants from existing facilities.

If the proposed new mall is not built or is built at substantially smaller scale, some stores that would otherwise occupy it would have resources available for reinvestment in improving (or expanding) their present operations. Public moneys that would be needed to remedy the lack of maintenance and physical deterioration following loss of tenants, could be devoted to revitalization and conservation strategies.

Other community development-stimulating investments -- past and future -- would have a chance to achieve their desired results.

## IX. GENERAL CONCLUSIONS

The proposed North Haven Mall project is well-located in relation to the geographical distribution of population and incomes in the South Central Connecticut Region. It should be able to capture sufficient market to support retail development of the scale and type envisioned.

If the project is built, benefits would accrue to the Town of North Haven in the form of increased property tax revenues and new jobs. Shoppers at the new mall would find a greater range and variety of merchandise available in a single location here than they could find elsewhere, either in the region, or outside it within a forty-mile radius. Consequently some consumers would experience savings in time and automobile fuel used in the course of their comparison shopping errands. Individual businesses at the mall would have exposure to greater volumes of customer traffic there than elsewhere in the region.

Success of the new mall could occur, however, only at the expense of existing retail developments elsewhere in the region, for the region is likely to have only extremely slow growth or virtually no growth over the next five to ten years. Even under the optimistic assumptions that total disposable income in the region will increase apace with inflation and that sales of the types of goods usually offered in shopping centers will remain in a constant relationship to aggregate personal income in the regional trade area, the total volume of business that can be anticipated in the region is insufficient to support the proposed new mall and existing retail developments at their past levels of business as well.

Three of the four major department stores that would be in the new mall are already represented in the region with facilities of comparable size to the ones that are proposed. The fourth of the new stores would be somewhat larger than the space the company currently occupies. It is highly likely that one or more of these stores would eventually, if not immediately, close its existing facility on opening at North Haven. Many of the smaller mall tenants could be expected to do likewise.

These shifts would result in diverting both customers and tenants away from existing commercial developments. Slow growth conditions would

make replacement of tenants difficult for many of these developments. The effects of vacancies sustained over an extended time would very likely be deterioration in physical appearance and maintenance and further loss of business, resulting in more vacancies and a blighting influence on the surrounding community.

Other adverse community impacts associated with the shifts of retail activity in the region could be expected to hurt Hamden, Wallingford, Meriden and New Haven particularly hard. Among these would be: loss of employment, losses in the businesses and services that are linked with retail activity, frustration of current revitalization efforts, constraints on the growth in tax base necessary to meet the rising costs of providing public services (with consequent curtailment of services and drop in the quality of community life most affecting those in the lowest socioeconomic strata). Moreover, the substantial Federal, State, local and private investments made in New Haven over the past thirty years so that its downtown could function efficiently as the regional retail core would be in jeopardy. Likewise, prospects for improved future mass transit service. For the new mall would offer, for the first time in the region, a retailing complex greater in breadth and depth than downtown New Haven's.

Besides the regionwide negative effects of shifts in the pattern of retail trade that operation of the new Mall would bring about, a number of more localized adverse impacts have been identified that relate to the physical development of the project. Among these are: traffic congestion in the vicinity of the mall site, increased flood levels in the Quinnipiac River Valley, damage to downstream wildlife conservation areas and commercial oyster beds, and possible damage to archeological resources and historic houses.



Federal actions which hasten the mall project would make no appreciable contribution to other Federal policy objectives respecting community development such as: furthering economic revitalization of distressed communities (especially central cities); stabilizing older,<sup>19</sup> established suburban communities; expanding job opportunities for minorities and the unemployed; expanding housing choices for the disadvantaged and minorities; strengthening the fiscal condition and tax base of distressed communities; conserving and revitalizing neighborhoods; or improving urban physical cultural and aesthetic environments.

Feasibility of the shopping center development is contingent on three Federal actions, the most immediate of these being a Corps of Engineers permit under Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act for fill of wetlands and backwater areas on the proposed mall site. The other actions involve commitment of Federal funds to highway improvements and to expansion of the sewerage and sewage treatment system in North Haven.

Decisions on these actions require a detailed review of environmental and urban impacts in general (because the impacts are expected to be significant) as well as specifically, a review of Federal policy objectives respecting urban development and community impacts. In the course of the environmental impact statement process which the Corps of Engineers will conduct over the coming eight to ten months, more detailed information and analyses will become available on this North Haven case. Issues raised by the present analysis must be reviewed

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19. Except for North Haven

and addressed in the EIS and should be directly responded to before decisions are made by the Federal government concerning action related to the mall which will likely hurt New Haven and other communities in the area. Clearly the proposed North Haven Mall project will provide visible benefits to its developers and builders, its tenants, customers, employees, and the fiscal health of the Town of North Haven. However, incidence of the mall's adverse impacts will be quite widespread, encompassing commercial developments elsewhere throughout the region; communities where existing retail developments will sustain the most substantial losses of trade, tenants and future investment potential; areas subject to increased flood risk (both developed and undeveloped); environmental problems; and efforts to arrest central city decline.

## APPENDICES



# CITY OF NEW HAVEN

NEW HAVEN, CONNECTICUT.

Development Administrator  
195 Church Street  
New Haven, Connecticut 06510  
Telephone 787-8333

January 17, 1980

Colonel Max B. Scheider  
Division Engineer  
Department of the Army  
New England Division  
Corps of Engineers  
424 Trapelo Road  
Waltham, Massachusetts 02154

Dear Colonel Scheider:

I am writing on behalf of the City of New Haven to respond to the December 17, 1979 Public Notice NEDOD-R-13-79-561 regarding Mall Properties, Inc., 635 Madison Avenue, New York, New York. They have requested a permit under Section 10 of the River and Harbor Act of 1899 and Section 404 of the Clean Water Act to place fill material in backwater areas of and wetlands adjacent to the Quinnipiac River at North Haven, Connecticut.

The Corps of Engineers decision whether to issue a permit is based on an evaluation of the probable impact of the proposed activity and its intended use on the public interest. That decision must reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal must be considered; among those are conservation, economics, aesthetics, general environmental concerns, historic values, fish and wildlife values, flood damage prevention, land use, navigation, recreation, water supply, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

The City of New Haven would like to take this opportunity to state for the purposes of the official record that it strongly opposes the issuance of a permit by the Corps of Engineers for the following reasons:

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1. The issuance of a permit by the Corps of Engineers will cause significant direct and indirect environmental, social and economic impacts that are irreversible and irretrievable;
2. The issuance of a permit by the Corps of Engineers would not be in the public interest and would not reflect the national concern for both protection and utilization of important resources;
3. The benefit which reasonably may be expected to accrue from the proposal does not balance against its reasonably foreseeable detriments;
4. The issuance of a permit is "not warranted" by the Corps of Engineers under any circumstances.

Following is a discussion which addresses some of the concerns of the City of New Haven. As an Environmental Impact Statement review will review all relevant factors, other concerns may be added later.

A. Regional Economics

1. The development of a massive retail facility in an area characterized by slowing population growth and a static economy will create far-reaching, long-term irreversible and irretrievable economic impacts throughout the region. This issue cannot be overlooked or underestimated.

On March 8, 1979, the Regional Planning Agency of South Central Connecticut presented clear evidence that the construction of the North Haven Mall would have a devastating impact on New Haven's revitalization effort. By reducing sales in downtown New Haven, the Mall would sharply reduce New Haven jobs and New Haven's tax base. The RPA concluded that the Mall would not merely supplement retail space in this region, but it would actually replace huge amounts of existing retail space, not just in downtown New Haven, but in Hamden, Milford and throughout the South Central Connecticut Region.

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The analysis developed by the RPA shows that population projections of the 1970's have fallen far short of expectations and will probably continue the slowing trend. In fact, the RPA's report noted that the official Connecticut projections have fallen from the original 1970 estimates of 815,000 to 558,000.

The RPA concluded that these revised expectations will have a profound impact on regional retail sales. As a direct result of this diminished population growth, the Mall, as proposed, would now capture at least one-third of all current G.A.F. (general merchandise, apparel and accessories and furniture) sales in the New Haven S.M.S.A. Furthermore, the analysis predicted that the New Haven Central Business District would lose \$22.5 million in sales revenues (27%) while the Hamden Plaza would lose \$10.3 million (21%) if this Mall is constructed.

2. In March, 1978, Governor Grasso issued Executive Order 20 which called for a halt to all projects which would squander our scarce natural and man-made resources by encouraging suburban sprawl. The Governor's mandate includes the following directives.

- "a. Revitalize the economic base of our urban areas by rebuilding older commercial and industrial areas and encouraging new enterprises to locate in central cities in order to protect existing jobs, and create new job opportunities needed to provide meaningful economic opportunity for our inner city residents.
- "b. Coordinate the conservation and growth of all areas of our state to ensure that each area preserves its unique character and sense of community and further ensure a balanced growth and prudent use of our state's scarce resources."

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Furthermore, in order to meet these goals, the Governor specifically directed that:

"The Secretary of the Office of Policy and Management, with the advice of various agencies, shall develop a comprehensive plan for the administration of existing policies and programs and will ensure that the ongoing efforts of the various state agencies are aimed at the revitalization of our urban areas.

"A capital Development Impact Statement indicating compliance with this Executive Order shall be filed with the Secretary of the Office of Policy and Management by each state agency for each capital project proposed for initial funding and for projects which have not received final financing approval prior to the date of this Executive Order."

3. In its 1978 Session, the Connecticut General Assembly adopted the Governor's urban policy, and the State's Plan of Conservation and Development of which it is a part. This document, which reflects the concurrence of both the Executive and Legislative branches of this State's government declares that:

"There has been a growing awareness at all levels of government and in various public and private sectors that trends adversely affecting urban areas impair the quality of life of all citizens regardless of residence and need. Urgent, increased attention and a planned coordinated effort of creating and implementing solutions are called for.

"New development must be managed and designed to minimize the consumption of resources and these limited resources must be wisely managed for the benefit of present and future generations. Concentrating new development in

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existing urban areas is essential to main-  
taining a healthy environment." (Emphasis  
added.)

In the "energy resource section" the Plan urges: "energy efficient patterns of development", "increased use of public transportation", "revitalization of urban centers" and the "reduction of automobile dependence".

These issues are supported in the Transportation Section which calls for "land use densities and development in locations that are supportive of mass transportation".

Other guidelines for the State action called for in this Plan require:

1. "The focus of state economic development support...of new economic activity to areas of high unemployment levels."
2. "Support major economic development projects only when urban centers are not adversely affected."
3. "Promote to the extent possible, the concentration of public transportation."

In addition to these several State policy initiatives, the President of the United States, in March of 1978, announced a National Urban Policy. Pursuant to that Policy, his administration is now putting the finishing touches on a document containing specific Federal policies with respect to suburban mall developments. It is clear from these Federal policy directions that major suburban mall development adjacent to older central cities is not perceived to be in the national interest.

#### B. Water Resources

The filling of the site and consequent construction of the Mall will displace an important flood storage area.



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The importance of this floodplain became obvious during the winter of 1979 when the proposed Mall site was under several feet of water. This flood was equivalent to the base level flood proposed for the Town of North Haven under the National Flood Insurance Program.

Through construction of the proposed Mall, floodwaters of the Quinnipiac River will be forced to stay within the river channel, thus increasing the elevation depth and velocity of the water, causing increased flooding downstream-and-in adjacent areas.

The impacts of Mall construction on the water quality of the Quinnipiac River and New Haven Harbor will be immediate and continuing. Given the nature of this project, there will be a marked siltation problem during construction. This siltation will in turn cause the erosion of stream banks, and decrease the depth of the river channel. The proposed use of substantial amounts of fill material will exacerbate this condition.

Once built, stormwater runoff from the 60 acre parking lot will bring oil, gasoline and other car-related pollutants into the river. We question the effectiveness of the holding pond system currently planned to deal with the runoff. We question its ability to function properly and suggest that this pond may have severe odor problems and other public health problems.

This area of the State of Connecticut serves as a major aquifer recharge area and has been identified by the State's 208 Program and hence is an important source of public water supply. The filling and paving of this area may have severe impacts on the quality and quantity of ground water. It will decrease the amount of area able to absorb rainwater and thus return it into the ground water. This may permanently change the depth and gradient of the water table. In addition, the loss of this large area of "land filter" together with the polluted stormwater runoff from the proposed Mall, may degrade the ground water quality.

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C. Special Land Features

The Mall site plan calls for the filling of a significant number of acres of wetlands. Wetlands serve numerous environmental functions and their destruction through filling and paving should be considered carefully. Wetlands serve several roles pertaining to drainage, stormwater storage, ground water recharge and wildlife habitat.

We question the wisdom of allowing these wetlands to be destroyed. The City of New Haven believes these wetlands to be "important" by definition, therefore, the Corps of Engineers should not grant a permit.

D. Flora and Fauna

We do not believe that the issuance of a permit by the Corps of Engineers is compatible with the goal of conservation of wildlife resources by prevention of their direct and indirect loss and damage.

E. Air Quality

There are both direct and indirect air quality impacts associated with the proposed Mall. The direct impacts involve construction activities and the operation of heating equipment. The indirect impacts are caused by motor-vehicles. The success of the proposed Mall is primarily dependent upon motor-vehicles bringing people to and from it.

The heating and other operational requirements of the proposed Mall will require permits to construct and operate. The operation of such a large facility may adversely affect air quality standards. Such an impact affects public health and future local and regional economic development.

The operation of a facility such as the proposed Mall is contrary to the intent of the Clean Air Act as amended and Connecticut's State Air Quality Implementation Plan. The Air Quality Control Region in which

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the proposed Mall is located violates the air quality health standards for oxidants, a secondary pollutant category that is primarily the result of motor-vehicle travel. It is Connecticut's mandate to reduce motor-vehicle travel in the coming years by approximately 10% to meet standards by 1987. The proposed Mall is contrary to this mandate and to the goals for healthy air resources in this region. The Mall will become a major destination point in the region, generating increased use of the motor vehicle.

Further, the December 17, 1979 Public Notice states that the applicant has received an Indirect Source Permit from the Connecticut Department of Environmental Protection. This is misleading information on two accounts:

- a. The Indirect Source Regulations no longer govern this type of construction, however, it governs road improvements; and
- b. When the permit was issued it was based on a significantly smaller Mall proposal.

The City of New Haven does not believe the proposal to have a clean bill of health on the outdated and defunct Indirect Source Permit. Carbon monoxide must be evaluated in the free-flow mode and at the intersectional level.

During construction there will be a significant increase in particulates (dust, dirt, etc.) directly attributable to the construction process. The use of trucks, bulldozers and other heavy equipment will generate pollution emissions as well.

The operating heating equipment for a Mall of this size will generate significant levels of emissions, particularly sulfur dioxide and particulates.

#### F. Noise

The impact of the Mall on the ambient noise level of the immediate area could be substantial. Noise impacts

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would primarily be related to auto and truck traffic. For example, the Bishop Street improvements previously mentioned will directly affect a residential neighborhood. This is not only a concern of the Corps of Engineers, but also a concern of FHWA and Conn DOT.

Noise impacts from the construction process may be substantial as well.

G. Traffic and Safety

As a major destination generating greatly increased volumes of traffic, this proposal will affect traffic patterns and road use over a large region. Impacts on public safety and congestion as well as increased air pollution must be adequately addressed.

The design of the project and/or conditions in the surrounding area may expose users and residents in the area to hazards due to circulation conflicts.

H. Transportation

Increased dependence on automobile travel and the associated decrease in the effectiveness of existing public transportation facilities, represents a blatant disregard for Federal and State efforts to conserve energy, relieve traffic congestion and to lessen pollution levels. No integrated, multimodal systems serve the proposed project area.

I. Land Use

The impacts on future housing, commercial development, open space and recreation land are great with a development of this type. The region cannot tolerate further suburban sprawl, strip development and reduction of valuable open space. Regional, State and Federal Land Use policies will be brought in to support this issue.

J. Waste Disposal

Already overextended, the North Haven solid waste dump site is now being used on a special DEP permit and the

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submitted Sewage Facilities Plans does not include an impact analysis for a Major Regional Mall proposal.

K. Energy

The President of the United States has asked for a commitment to firm energy conservation policies as fuel resources become more scarce and expensive for the nation and particularly the northeast. A development of this scale at this time is in direct conflict with the letter and intent of the national energy policies.

Increased automobile use and energy necessary to build and operate an unnecessary facility should be thoroughly considered in light of a continuing energy shortage.

The above represents some of the many factors that have been engendered by the proposed Mall which clearly will influence your permit decision. We believe that such conflicts are reasons for permit denial. We do not regard this as an absolute list, therefore, we reserve the right to register other concerns during the permit process.

Attached for the record of this Public Notice is a copy of November 13, 1979 testimony presented by the City of New Haven at the Connecticut State Traffic Commission Hearings. The purpose of this hearing was the issuance of a safety permit for selected road improvements necessary for the operation of the proposed Mall. This is submitted for your record since many, if not all, of the issues are relevant and critical to your mandate of making a decision that best protects the "public interest". In summary, this attached November 13, 1979 testimony includes the following points:

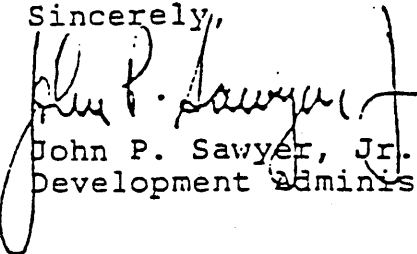
1. The original local zoning approval for mall development appeared to be defective. Since the submission of this testimony, the North Haven Town Attorney has ruled as such;
2. There is no locally approved final site plan;
3. Critical Mall-related road improvements had been excluded from the safety permit application;

Colonel Max B. Scheider  
Page 11  
January 17, 1980

4. At least two road improvements called for in the application cannot immediately proceed; and
5. The proposal violates the intent of the Connecticut Environmental Policy Act. In fact, the North Haven citizens group, Stop the Mall/CCAG, has filed a December 12, 1979 letter with the Connecticut Council of Environmental Quality requesting their investigation, as provided by Connecticut State Statute, of violations on the part of the Connecticut Department of Transportation and the Connecticut State Traffic Commission. A copy of their letter is also attached for the record.

I hope that the above information will assist you in developing a comprehensive Environmental Impact Statement.

Sincerely,



John P. Sawyer, Jr.  
Development Administrator

Attachments



DOWNTOWN DEVELOPMENT

OFFICE OF THE MAYOR

CITY OF NEW HAVEN  
CONNECTICUT 06508



BIAGIO DIL'ETO  
MAYOR

April 8, 1980

Mr. Robert C. Embry, Jr.  
Assistant Secretary for Community  
Planning and Development  
Department of Housing and Urban  
Development  
Washington, D. C. 20410

Dear Assistant Secretary Embry:

As Mayor of the City of New Haven, Connecticut, I am extremely pleased that the Department of Housing and Urban Development, is undertaking the preparation of a community impact analysis in regard to the proposed North Haven Regional Shopping Mall and the Army Corps of Engineers' responsibility for granting a 404E permit for its construction. I believe that this Mall, if built, will have a profound, long-term negative impact on the economies of New Haven and the entire region, and I want to reinforce this City's concern for its businesses, its residents and its future as an urban center.

My concerns are numerous and reflect the concerns of many mayors of older urban centers. The City of New Haven has long been opposed to developments which siphon off the economic resources of urban centers and further degrade the efficiency of existing infrastructure, the effectiveness of public services and the quality of life of our urban residents. For over a year New Haven has publicly opposed the construction of the North Haven Regional Shopping Mall, a proposed retail facility of 1.2 million square feet, which would dwarf commercial centers throughout the region and nearly equal the total retail space of downtown New Haven. There is little doubt of the extreme impact this would have on the economic balance of South Central Connecticut, an area identified with static population and slowed economic growth.

While the regional economic stability is of vital importance, my main concern is over the potential effects this development would have on New Haven. Like many older urban centers,



Mr. Robert C. Embry, Jr.  
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April 8, 1980

New Haven has experienced an economic shift from city to suburb over the past thirty years. The loss of industry and population has been at least partly counteracted by a growth of the service and commercial sector, supporting the City's role as the central destination for economic activity as well as the cultural, educational, health service and governmental center. The development of a massive retail facility in a suburban location has the potential of not only undermining New Haven's commercial sector, but could have serious long-term effects on the economic base and social structure of the City.

An Analysis of Market Potential, prepared by Halcyon, Ltd. Consultants in October, 1978 cited the potential impact of a suburban mall on New Haven's economy. Using data from this report and recognizing its critical role in evaluating regional impacts of large scale developments, the Regional Planning Agency of South Central Connecticut issued a statement on March 8, 1979 outlining the results of a preliminary regional economic analysis (Attachment A). The study concluded that there would be a significant shift or "replacement" of retail space throughout the region -- the greatest burden to be borne by the City of New Haven. The Regional Planning Agency has consistently been opposed to the various proposals for regional shopping malls, which, because of their immense size and regional drawing power, could significantly disrupt the regional economy.

The New Haven City Plan Commission and former Mayor Frank Logue issued strong statements opposing the development of regional suburban malls (Attachments B and C).

The City of New Haven views the issuance of a Army Corps 404E permit and the use of Federal funds to make mall related road improvements as an abandoning of New Haven as a viable urban center and in direct conflict with the letter and intent of the President's Urban Policy and Community Conservation Guidelines.

The construction of a major regional shopping mall ten miles from New Haven's downtown poses a grave threat to the success of our revitalization efforts. With the retailing drawing power of a new facility of this size in a relatively static economy, New Haven can expect the following obvious consequences:

Mr. Robert C Embry, Jr.  
Page 3  
April 8, 1980

1. The relocation of some downtown retail establishments to the new Mall. The stores which would move would be those with the strongest regional drawing power and high quality merchandise.
2. An expansion of some downtown retail establishments to the Mall in an effort to retain a market share in the region. A resulting de-emphasis of the downtown store could be reasonably expected.
3. Reduced property values and taxes as vacancies are filled by lower quality establishments or not filled at all.
4. Reduction of employment opportunities in the downtown. Without effective public transportation to a suburban location, New Haven's poor and minority population will be most affected by an employment shift.
5. Reduction of the efficiency of New Haven's public transportation system.
6. Reduced incentives for increasing downtown residential opportunities and the potential failure of projects underway, such as the conversion of the abandoned Taft Hotel to market rate apartments.
7. A high potential for further disinvestment by local industry and commercial office enterprises, exacerbating all the above consequences, reducing the economic base, and eliminating the opportunities to attract new business to New Haven.

The effects listed above are documented across the nation where local economies have been effectively derailed by massive competing developments. "Free Enterprise" takes on a very different meaning when it affects the economy and quality of life of an entire region and, in effect, erases the hard-earned successes of three decades and the progress which has resulted from Federal urban programs.

New Haven has taken great strides in the last two decades, with Federal and State assistance, to maintain and strengthen its position as the core City of the region. The City is presently undertaking numerous public projects as part of a revitalization process. To name only a few, these include:

Mr. Robert C. Embry, Jr.

Page 4

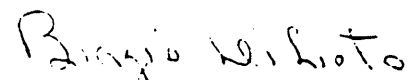
April 8, 1980

1. The renovation of the historic Shubert Theatre as an entertainment and cultural center.
2. The rehabilitation of the Taft Hotel, a City landmark, for reuse as 200 market-rate apartment units.
3. The construction of a Municipal Government Center.
4. An air-rights parking facility to enable the expansion of the Yale-New Haven Hospital.
5. The development of a Neighborhood Commercial Revitalization Program which will strengthen our urban neighborhood centers.
6. The creation of a Small Business Assistance Program to encourage the expansion of the City's commercial base.

In the last year we have seen the Federal and State governments recognize the contradictions of increased emphasis on revitalizing urban centers while directly or indirectly encouraging a continued shift away from the cities. President Carter's Urban Policy and the recent Community Conservation Guidelines is seen as an attempt to eliminate these contradictions and to reaffirm a commitment to the cities.

I therefore re-emphasize the need for a thorough analysis of the long term impacts of the above proposed Federal actions on New Haven's economy and offer my assistance in forwarding required information to your staff.

Sincerely,

  
Biagio DiLieto  
Mayor

cc: Mr. Marshall Kaplan  
Deputy Assistant Secretary  
for Urban Policy  
Mr. Jack Watson  
Assistant to the President

## APPENDIX C.

11 OCT 1979

Interagency Memorandum of Agreement  
Between  
U.S. Department of Housing and Urban Development  
and U.S. Army Corps of Engineers

1. Purpose.

This agreement between the Secretary of the Army and the Secretary of the Department of Housing and Urban Development is made in order to facilitate interagency cooperation, coordination and management of urban development programs insofar as they are affected by the Department of the Army Water Resource Regulatory Programs administered by the Corps of Engineers. It is directed at furthering implementation of the President's Urban Policy announced on March 27, 1978. This agreement is intended to reduce duplication of effort, paperwork and delays in reviewing permit applications which affect the urban environment.

2. Definitions.

a. "Corps" means the Corps of Engineers or any official of the Corps of Engineers acting within his regulatory authority on behalf of the Secretary of the Army.

b. "Water Resource Regulatory Program" means those responsibilities of the Corps for evaluating permit applications under the provisions of Sections 9 and 10 of the River and Harbor Act of 1899, Section 404 of the Clean Water Act of 1977, and Section 103 of the Marine Protection Research and Sanctuaries Act of 1972. It also includes enforcement actions and technical and management studies related to the program.

3. Processing Permit Applications Having Urban Impacts.

a. Corps' district offices having permit responsibilities will provide copies of public notices for proposed work to HUD area offices.

b. HUD area offices will provide comments, as appropriate, on the possible urban impact of the proposed work. These comments will be forwarded within 30 days to the Corps' district office. The District Engineer, as the Federal decision-maker, will consider these comments in making his public interest review and decision on the permit application.

4. Agency Cooperation.

Both agencies will cooperate in early identification of projects having significant urban impacts. The field offices will develop

11 OCT 1979

2

lines of communication and effective means to jointly address issues, problems, or disputes that may impede the effective implementation of the President's Urban Policy or the missions of the signatory agencies.

In the interest of expediting permit decisions, it is agreed that except for those cases having a significant impact on the urban environment, i.e., those requiring an EIS, resolution will be at the District Engineer's level. Through joint HUD/Corps discussions appropriate urban impact strategies will be defined and staff assistance secured.

5. Information Exchange.

The Corps and HUD at every level will insure that personnel are familiar with the role of the Corps' regulatory program as it relates to evaluation of permit applications that may have an impact on the urban environment. Every effort will be made to identify, as early as possible, those projects which will require a Corps permit and what the possible impacts may be. As appropriate, HUD representatives will participate in review of permit applications.

6. Assessment Techniques.

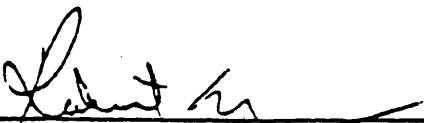
The Corps agrees to work toward the development of effective techniques for urban impact assessment of Corps actions, with HUD providing appropriate technical assistance.

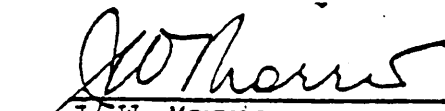
7. HUD Funded Projects.

It is agreed that where HUD has funded or assisted a project it will be considered the lead agency as defined by the NEPA regulations, 40 CFR Parts 1500-1508.

8. Agreement Monitoring.

HUD and the Corps agree to monitor this agreement and its effectiveness. To this end, the Office of the Chief of Engineers, Department of the Army, and the Office of Urban Policy, Department of Housing and Urban Development, will create a working committee. It will meet on an as required basis but no less frequently than quarterly. One of the primary purposes of these meetings will be to review field decisions and develop guidance, as appropriate to reduce adverse impacts on the urban environment.

  
Robert C. Embry, Jr.  
Assistant Secretary for Community  
Planning and Development

  
J. W. Morris  
Lieutenant General, USA  
Chief of Engineers

NOV 28 1979

THE WHITE HOUSE  
WASHINGTON

COMMUNITY CONSERVATION GUIDANCE

PREFACE

This Community Conservation Guidance provides implementing procedures for an important aspect of several of President Carter's policy initiatives, including his "urban" policy, energy policy, and his policy of targeting federal assistance to those areas and people that need them most. This guidance is predicated on the belief that public and private investment ought to build upon existing resources to the greatest extent possible in order to avoid unnecessary and costly duplication and waste.

It is critically important that federal policies, grants, and decisions not have unintended effects of eroding existing commercial centers whether they be located in center cities or the suburbs or rural areas. Moreover, Federal programs should not work at cross-purposes with each other in achieving the national goals of the President's Partnership to Conserve America's Communities.

State and local leaders are virtually unanimous in recommending that there be a process through which officials can insure that federal policies and practices will be reviewed when there is strong reason to believe that such policies and practices will erode existing community resources and investments, wherever they are located.

The Conservation Guidelines provide such a process without creating any new regulations or additional bureaucracy. There will be no excessive delays, extra staff requirements or paperwork associated

with this guidance. In fact, the process outlined is characterized by rapid review, consultation, and decision-making without pre-judgement in those instances in which (a) a private development is being significantly aided by federal actions or monies, and (b) a local community identifies in as much detail as possible how such federal actions or monies will result in damage to existing commercial areas.

The Community Conservation Guidance is not intended to delay or prevent any specific industry, type of development, or group from pursuing its legal and private economic purposes. Rather, it is a specific example of the implementation of the Carter Administration's policies and goals for the efficient and effective operation of federal programs.

BACKGROUND -- President's Partnership to Conserve America's  
Communities

Guidance provided in this memorandum should be understood in the context of the many actions which have been taken to carry out the President's numerous policy commitments to reduce or eliminate Federal actions which contribute to unplanned urban sprawl; to conserve energy; to target limited funds; and to encourage Federal actions which help strengthen urban area economies and their downtown areas. These actions include the four Executive Orders issued by the President on August 16, 1978, and the numerous pieces of legislation proposed to the Congress during the last two-and one-half years, all associated with the President's "urban policy."

Several agencies, consistent with the thrust of the President's Executive Order 12074 have agreed to subject their major programs and activities to community impact analyses prior to initiating them in order to avoid inadvertent possible negative impacts on cities and their residents. These analyses will cover the effect of Federally-assisted projects on central cities and surrounding communities and will result in greater consistency between Federal aid and national policies.

INTRODUCTION -- Initiatives to Strengthen Existing Business Districts

Healthy existing commercial areas are essential to a community's overall well-being. As commercial centers, they are vital sources of jobs, goods and services and tax revenues. Historically, Congress and the Executive Branch have made significant commitments to help localities preserve and strengthen their present commercial areas. President Carter's policy initiatives in economic and community development renew and reinforce that commitment.

Federal efforts to assist in the revitalization and growth of older commercial areas have ranged from subsidizing the development of, or improvements to, costly infrastructure to providing loan guarantees and grants for the development or rehabilitation of commercial areas and establishments. They have included activities aimed at eliminating traffic



congestion and expanding transportation options, reducing environmental and safety problems, and actions to increase employment and training assistance to private sector businesses to hire the structurally unemployed.

#### Part I: Strengthening Older Commercial Areas

This Administration, consistent with the President's New Partnership to Conserve America's Communities, is committed to help older distressed areas (whether city, town, or suburb) preserve and protect their investment in existing commercial areas. As relevant, it is resolved to assist all communities, in partnership with all levels of government and the private sector, enhance the economic vitality of older commercial areas and the ability of such areas to respond to the commercial, cultural, service and job needs of urban residents.

To improve this Administration's ability to encourage, through appropriate Federal action, the development and/or redevelopment of healthy older commercial areas:

(1) The President's Interagency Coordinating Council (IACC) will encourage closer cooperation with respect to Federal programs directed at helping revitalize older commercial areas. Agencies will be asked to work together to (a) simplify current guidelines governing economic and community development assistance programs in order to improve their responsiveness to locally defined needs; and (b) facilitate strategic use of economic and community development programs in order to build public/private partnerships directed at older commercial area revitalization.

(2) State, area-wide, and local governments will be encouraged to use available Federal technical and planning assistance programs to develop comprehensive policies and growth strategies responsive to the overall revitalization needs of existing older commercial areas.

(3) Federal agencies should review their present policies, procedures and regulations for the purpose of identifying which of their key policies, programs and activities now provide (and could provide with revisions) direct and/or indirect assistance to older commercial areas for revitalization needs. Agencies should change their policies and programs, if necessary, to permit a more effective and strategic response to such revitalization needs.

(4) Each agency administering programs relevant to revitalization of older commercial areas and central business districts will be asked to consult on a continuing basis with relevant private sector and public interest groups, as well as with state and local governments in order to improve the administration of their programs.

## Part II: Community Conservation

As indicated in the President's national policies, unplanned sprawl can often be wasteful of our nation's resources. It requires heavy expenditures of scarce public resources for often underutilized infrastructure; it consumes valuable land; and it leads to the wasteful use of limited energy resources. It can weaken the economic, social and environmental health of existing communities.

Federal as well as state and local actions have sometimes unintentionally reinforced or supported unplanned sprawl and related decentralizing trends. And, while most large commercial developments on the fringe of our urban areas have responded well to the needs

of a growing population, some have drained economic vitality from existing business districts in small, medium, and large communities. This can create environmental problems as well as contribute to a reduction of jobs and services available to center city populations, particularly low-moderate income and minority households.

The primary objective of the guidelines enumerated below is to encourage, through appropriate Federal, state and local action, the targeting of limited resources on the redevelopment and/or development by the private sector of older commercial areas. In order to accomplish this, they are aimed at discouraging major Federal actions that will directly lead to the construction of those, and only those, large commercial developments that clearly and demonstrably weaken existing communities, particularly their established business districts. Federal actions, where relevant, should help assure the location of large commercial developments in areas consistent with state, area-wide and local plans and the provisions of the President's Policy to Conserve America's Communities.

To accomplish these goals, the Administration will undertake the following steps:

(1) If the chief elected official of an affected community formally requests it, (a) federal agencies will prepare a community impact analysis of pending federal actions (b) which might lead to a large commercial development inside or outside the boundaries of the affected community. Such an analysis will be prepared within 45 working days from receipt of the local officials' request.

(2) Community impact analysis should be directed at determining the consequences (positive and negative (c)) of the pending Federal action on the existing business districts of the communities requesting it, as well as on the community itself. It should also indicate the general impact of the pending Federal action on the surrounding metropolitan area and the area where the Federal action is to take place.

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(a) The formal request by local officials must, at a minimum, include the following: (1) a statement indicating why local officials are concerned with the Federal action; (2) evidence of city/town council or, where relevant, county supervisor or commission support; (3) a statement establishing the link between the Federal action and the development of the large commercial development; (4) a statement describing the local officials' perception of the effect the commercial development will have on the business district; (5) a statement illustrating local public and private actions which have been taken, which are being taken, and which will be taken to strengthen the economic vitality of existing commercial areas; and (6) a statement indicating that local government has sought to discuss or negotiate the concerns expressed with the applicant for Federal action which is in question. Conversely, an applicant who seeks to respond to the possibility of negative community impact before beginning a project can petition the governing body of the affected jurisdictions request a community impact analysis.

(b) Action is defined in NEPA Regulations, 1508.18. "Actions" refer only to actions which will be approved and/or initiated subsequent to the effective date of the policy. It is not the intent of this policy to initiate community impact analyses on approvals which have already been granted or on actions which have already been initiated by Federal agencies.

(c) Negative impact shall include, but not be limited to, the following: (1) significant loss of aggregate jobs; (2) significant reduction in tax base; (3) significant loss of employment opportunities for minorities; and (4) significant impact on strengthening population decentralization trends and increasing use of energy; and (5) a significant adverse impact on future cost and availability of retail goods and services.

The community impact analysis should acknowledge, and not duplicate, relevant and available local demographic, economic and market studies. It should be considerate of the views of appropriate local public officials, community groups and private sector leadership, and where relevant, developers of affected large commercial developments concerning, particularly: (a) the effect of the pending Federal action; (b) the economic health of the business district(s) of the community requesting the analysis; and (c) the willingness and desire of the public and private sector from the community requesting the analysis to work together to strengthen development and revitalization opportunities in the existing business district(s).

(3) If the community impact analysis demonstrates that significant negative consequences will result from the pending Federal action, the Federal agency responsible for the action should consider modifications or mitigating options consistent with relevant statutes, the Agency's mission and the President's national policies.

(4) As part of the President's program to reduce paperwork and to avoid burdening state and local officials and the private sector with unnecessary red tape, community impact analyses, when prepared should be coordinated with the requirements of NEPA

regulations. (d) Whenever possible, the information required to be compiled under 40 CFR S1502 should be utilized in preparing community impact analyses. (e) Similarly, information used

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(d) NEPA regulations and the reference to 40 CFR S1502 refer to regulations promulgated as a result of the National Environmental Policy Act, the Environmental Quality Act of 1970, and related Executive Orders.

(e) Although much of the information utilized in community impact analyses and environmental impact statements will be the same, the community impact analysis is not technically or legally an environmental impact statement since it is prepared pursuant to this guidance, rather than pursuant to NEPA.

to compile Clearinghouse Community Impact Analyses pursuant to Circular A-95 should be used whenever possible in preparing community impact analyses resulting from this policy.

Each Federal agency will provide periodic reports to the IACC descriptive of its performance with respect to implementation of the initiatives described in this memorandum.

## APPENDIX E

LIST OF PEOPLE CONTACTED

Rob Adler, Corps of Engineers, New England Division, Impact Analysis Branch.

Michael Aldee, Planner, City of Meriden.

Donate J. Altobelli, Division Administrator, FHWA Connecticut Division, U.S. DOT.

Norris Andrews, South Central Connecticut Regional Planning Agency.

John E. Baker, Division Chief, Aquaculture Division, Connecticut Department of Agriculture.

Fred Bannoch, Principal Sanitary Engineer, Water Compliance Unit, Connecticut Department of Environmental Protection.

Ernest Beckwith, Marine Fisheries Office, Connecticut Department of Environmental Protection.

Paul Biscuti, State Water Resources Unit, Division of Environmental Quality, Connecticut Department of Environmental Protection.

Mark Chertok, Winer, Neuburger & Sive, Representative of Mall Properties, Inc.

Scott Cleveland, Office of Economic Development, City of New Haven.

Carmen de Batista, Office of Economic Development, City of New Haven.

Robert De Sista, Corps of Engineers, New England Division Regulatory Branch.

Edward Fijol, Manager of Design, Connecticut Department of Transportation, Bureau of Highways.

Phillip Forzely, Environmental Officer, HUD Area Office, Hartford, Connecticut.

Roberta Friedman, Stop the Mall, CCAG.

William Fulbrook, Planner, Town of West Haven.

Walter Gawrych, First Selectman, Town of North Haven.

Mrs. Gonzalez, Planner, Town of Hamden.

William Hogan, Connecticut Department of Environmental Protection.

Ronald Keeshak, Office of Economic Development, City of New Haven.

Julius Levine, Gladstone Associates.

Melvin Levine, American City Corporation.

Vernon Long, U.S. Fish and Wildlife Service, Ecological Service, Region V.

David Manke, Environmental Analyst, Connecticut Department of Environmental Protection, Water Resources Unit.

Richard Mason, Connecticut Department of Environmental Protection,  
Water Compliance Staff.

Daniel Millstone, Connecticut Fund for the Environment.

Michael Prochaska, shopping center designer.

Sandy Ranciato, Planner, Town of North Haven.

Eric Smith, Marine Fisheries Office, Connecticut Department of  
Environmental Protection.

Thomas Wilson, Planner, City of Milford.

Lewis Zutto, Planner, Town of East Haven.



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## APPENDIX S

### Habitat Evaluation Procedures (HEP) Report

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# NORTH HAVEN MALL

NORTH HAVEN, CONNECTICUT



1981



**US Army Corps  
of Engineers**

New England Division

## Appendix S

### Habitat Evaluation Procedures (HEP) Report

The material contained in this appendix was prepared by the U.S. Fish and Wildlife Service in cooperation with the Corps of Engineers. It is being used in support of application #13-79-561 for a permit under Section 404 of the Clean Water Act of 1977, and Section 10 of the River and Harbor Act of 1899.



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
FISH AND WILDLIFE SERVICE  
New England Area Office  
P. O. Box 2518  
Concord, New Hampshire 03301

Col. C. Ernest Edgar, III  
Division Engineer  
U.S. Army Corps of Engineers  
New England Division  
424 Trapelo Road  
Waltham, Massachusetts 02154

Dear Colonel Edgar:

Enclosed are three (3) copies of our Habitat Evaluation Procedures (HEP) Report on the North Haven Mall, North Haven, Connecticut. I understand that you will include this report as an appendix in the Draft Environmental Impact Statement for the project.

As stated in our report, this is not an official Fish and Wildlife Coordination Act (FWCA) report on the project. When we have had the opportunity to review the Draft Environmental Impact Statement, we will then furnish you with a FWCA report on the permit application.

Sincerely yours,

*Charles R. Maloy*

Charles R. Maloy  
Area Manager

Enclosures



North Haven Mall, North Haven, Connecticut

Habitat Analysis

INTRODUCTION

Mall Properties, Inc., has requested a permit from the Army Corps of Engineers to place fill in wetlands adjacent to the Quinnipiac River in North Haven, Connecticut, for the purpose of constructing a shopping mall. Because of the anticipated environmental impacts of the proposal, the Corps determined that an Environmental Impact Statement was required, under provisions of the National Environmental Policy Act of 1969. Under provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the Fish and Wildlife Service investigates proposed Federal actions and other actions requiring a federal permit or license that may affect any stream or other body of water and makes recommendations for the conservation and development of fish and wildlife resources. "Recommendations...shall be as specific as practicable with respect to features recommended for wildlife conservation and development, lands to be utilized or acquired for such purposes, the results expected, and shall describe the damage to wildlife attributable to the project and the measures proposed for mitigating or compensating for these damages." Under regulations issued by the Council on Environmental Quality for implementing the National Environmental Policy Act, the Corps of Engineers, as lead agency, requested the Fish and Wildlife Service to serve as a cooperating agency in the NEPA process, with special expertise in wetlands and aquatic resources. Upon agreeing to do so, the Service was then asked to prepare a report on the project, using the Habitat Evaluation Procedures (HEP).

On July 15, 1980, an evaluation team composed of representatives of the Corps of Engineers, Jason M. Cortell & Associates, Inc., (representing Mall Properties) and the Fish and Wildlife Service conducted an analysis of the wildlife resources in the area to be impacted by the North Haven Mall. The team used the Fish and Wildlife Service Habitat Evaluation Procedures (HEP) of July 1, 1976.

The HEP allows a quantitative evaluation of project impacts by identifying areas of similar vegetative composition (habitat types), and then estimating the ability of these habitat types to support selected species of animals representing a broad cross section of species associated with each habitat type. This is a measure of the biological productivity of each habitat type.

Five habitat types were selected for evaluation in the project area, using from 5 to 10 evaluation species for each type. At each sample site, the habitat value for each species was determined based on a scale of 1 to 10. The totals for each habitat type were then added for each of the species. This gives a rating on a scale of 10 to 100 representing the maximum value attainable (Habitat Type Unit Value). These habitat type unit values measure the capability of the site to support the selected species (i.e., food, shelter, and

overall productivity). Habitat units were then determined by multiplying the acres of the habitat type by the habitat type unit values. The base value, the habitat unit value of each habitat type, will then be increased or decreased as the habitat type is changed or impacted in time resulting in a corresponding change in habitat units.

By estimating the expected land use changes over a specified number of years, in this case 25 years, the project life is evaluated in two ways: (1) changes in land use in the 25-year evaluation period without the project, and (2) land use changes in the 25-year evaluation period with the project. For simplification, the 25-year period was broken into target years of 0, 1, and 25. Projections of total habitat units for the future without and with the project are computed by habitat type. The net difference in the total habitat units indicate either gains (enhancement to the biological productivity) or losses (negative impacts to the biological productivity). These net gains or losses are clearly attributable to the project, or project induced and must be treated as positive or negative project benefits.

The identifiable project-induced losses should be fully compensated to minimize adverse effects on fish and wildlife resources and other associated environmental attributes. Compensation for project damages is possible only by replacement of habitat unit (biological productivity) losses. To accomplish this replacement, the existing habitat unit value of each habitat type must be increased over time. The most effective way to increase the habitat unit value is to manage the habitat for the wildlife species utilized in the evaluation procedures. A determination was made by the HEP team of the management potential for each habitat type. This measures the potential of the habitat to increase in value for wildlife if wildlife management practices are implemented. The difference between the habitat unit values without and with management is the management potential unit value or increase in value due to wildlife management. Area required for compensation is determined by dividing the habitat unit losses by the management potential unit value for each habitat type.

#### DETERMINATION OF HABITAT UNIT VALUES FOR THE HABITAT TYPES

The basic decisions pertaining to the value of the wildlife habitats were accomplished in the field by a Habitat Evaluation Team composed of biologists representing the U. S. Army Corps of Engineers; Jason Cortell & Associates (representing the Applicant); and the U. S. Fish and Wildlife Service.

Habitat typing was done by Jason Cortell & Associates, based on vegetative community types. Nine habitat types were present on the site, consisting of upland forest, successional shrub, old field, disturbed, developed, wooded swamp, shrub swamp, marsh, and open water. The disturbed, developed, and open

water types are a result of past and on-going sand and gravel mining at the site, and it was decided not to include them in the evaluation. The successional shrub and old field types were evaluated as one type, making a total of five habitat types evaluated.

The team evaluated the five habitat types using 10 representative species for the upland forest and wooded swamps, six species for the marsh, and five species for the shrub swamp and successional shrub/old field. Values for the habitat types using less than 10 species were prorated, to be consistent with the other values. A total of 26 species were used (Table 1). The species were objectively selected to include those that can be utilized both consumptively (hunting, trapping) and non-consumptively (bird-watching, nature study). Habitat criteria were developed for each species so that the team members could evaluate each habitat type, for each selected species, on the basis of knowledge common to the team. Preliminary drafts of Habitat Suitability Index species models were used for this purpose.

The results of the field evaluation are given in Tables 2.1 to 2.5.

#### DETERMINATION OF HABITAT UNIT LOSSES

In order to determine habitat unit losses, it is necessary to estimate land use changes over a certain number of years. For this report, economic and land use impacts predicted by Gladstone Associates, a consultant to the Applicant, were utilized. They predicted the economic life of the project to be 20-30 years, thus 25 years was chosen, and habitat unit losses annualized over this period. Target years of 0 (start of construction), 1, and 25 were selected. The team assigned a value to existing habitat (Tables 2.1-2.5). Other values were predicted for the habitat with and without the project over the 25-year period. These data were computed on an annualized basis over the 25-year project life.

Gladstone Associates predicted that without the mall project, no development within a period of 15-20 years would occur in the northern half of the site, which contains the habitat types of upland forest, successional shrub/old field, and wooded swamp. This is because the demand for office or industrial space in the town of North Haven is insufficient to justify the cost of the infrastructure (roads, utilities, etc.) necessary to develop the site in an economically competitive manner. They similarly report for the southern half of the site, containing the shrub swamp and marsh habitats, that a resumption of sand and gravel mining would be the only foreseeable development within the 15-20 year period. However, even this development is not a foregone conclusion, since it is likely that wetland permits would be required for any expansion of the existing operation. This is because some fill material, even if only temporary, would likely be discharged into a wetland to expand the operation, thus requiring a permit. Because of uncertainties in this matter, including the fact that

an activity necessitating a permit is not automatically precluded from obtaining a permit, we assumed that one-half of the shrub swamp and marsh habitats would be lost without the project, beginning in year one (1) and continuing until one-half was lost by year 25. Other assumptions made were that habitat changes beneficial for some species would be detrimental to others, thus resulting in no major habitat unit value change over the 25 years without the project.

Habitat unit losses based on these projections are displayed in Table 3. These projections show an annualized habitat unit loss of 726 for upland habitat and 1264 for wetland habitat, for a total of 1990 habitat units.

#### DETERMINATION OF MANAGEMENT POTENTIAL & MANAGEMENT POTENTIAL UNIT VALUE

The HEP team determined what wildlife management practices could be accomplished on the study area and what corresponding increase in habitat unit value would occur as a result of these practices. Techniques such as clearcutting, nesting platforms, coniferous plantings, dugout ponds, water control structures, and food plantings were identified. Management potential unit value is the net annualized habitat unit value, or the average annual increase in the baseline habitat unit value attributed to wildlife management over the life of the project. Since the majority of the above-mentioned management techniques would improve habitat productivity in a relatively short time, it was assumed that the management potential unit values could be achieved at year one (1). Management potential unit values are displayed in Table 4.

#### MITIGATION DETERMINATION

The area required for mitigation is determined by dividing the net annualized habitat unit loss by the management potential unit value. The results of this determination are shown in Table 5. To mitigate for the loss of 21 acres of upland habitat, 71 acres of replacement habitat would be needed; for the loss of 25 acres of wetland habitat, 56 acres of replacement habitat would be required.

Ideally, replacement habitat would be the same type and have the same management potential as project lands. However, there is considerable flexibility in meeting the objective of replacing habitat unit losses. For instance, if habitat losses cannot be mitigated in-kind (like habitat), out-of-kind or different habitats can be considered, provided habitat unit losses are replaced. Or, replacement lands of lesser acreage but with greater management potential could compensate for habitat unit losses. Management techniques to be used on mitigation lands would be the same or similar to those discussed above for the project lands, but are not solely restricted to those discussed.



It is to be understood that acquisition and management of mitigation lands, or the funding of such, is the responsibility of the Applicant. Funds for management should be sufficient to cover the assumed 25 year life of the project.

#### DISCUSSION

The foregoing presents the results of the HEP analysis of the North Haven Mall project site. It does not, at this time, represent the official position of the Department of the Interior or the Fish and Wildlife Service on the project, nor should it be construed as a Fish and Wildlife Coordination Act report. The official position of the Department and the Service will be stated in a Fish and Wildlife Coordination Act report to the Army Corps of Engineers, along with recommendations, after the Draft Environmental Impact Statement is available for review.

TABLE 1. Evaluation Elements by Habitat Type.

<u>Evaluation Elements</u> (Species)	<u>Upland</u> <u>Forest</u>	<u>Wooded</u> <u>Swamp</u>	<u>Successional</u> <u>Shrub/Old Field</u>	<u>Shrub</u> <u>Swamp</u>	<u>Marsh</u>
<u>MAMMALS</u>					
White-tailed Deer ( <u>Odocoileus virginianus</u> )	X	X			
Raccoon ( <u>Procyon lotor</u> )	X	X			
Gray Squirrel ( <u>Sciurus carolinensis</u> )	X				
Chipmunk ( <u>Tamias striatus</u> )		X			
Muskrat ( <u>Ondatra zibethica</u> )				X	X
Eastern Cottontail ( <u>Sylvilagus floridanus</u> )			X	X	
Meadow Vole ( <u>Microtus pennsylvanicus</u> )			X		
<u>BIRDS</u>					
Great Blue Heron ( <u>Ardea herodias</u> )					X
Wood Duck ( <u>Aix sponsa</u> )		X			X
Red-tailed Hawk ( <u>Buteo jamaicensis</u> )	X	X			
American Kestrel ( <u>Falco sparverius</u> )			X		
Downy Woodpecker ( <u>Dendrocopus pubescens</u> )	X				
Black-capped Chickadee ( <u>Parus atricapillus</u> )	X				
Wood Thrush ( <u>Hylocichla mustelina</u> )	X	X			
Red-Eyed Vireo ( <u>Vireo olivaceus</u> )	X	X			

<u>Evaluation Elements</u> <u>(Species)</u>	<u>Upland</u> <u>Forest</u>	<u>Wooded</u> <u>Swamp</u>	<u>Successional</u> <u>Shrub/Old Field</u>	<u>Shrub</u> <u>Swamp</u>	<u>Marsh</u>
Indigo Bunting ( <u>Passerina cyanea</u> )			X	-	
Yellow Warbler ( <u>Dendroica petechia</u> )				X	
Yellowthroat ( <u>Geothlypis trichas</u> )			X		
Red-wing Blackbird ( <u>Agelaius phoeniceus</u> )				X	X
<u>HERPETOFAUNA</u>					
Eastern Box Turtle ( <u>Terrapene carolina</u> )	X				
Northern Water Snake ( <u>Natrix sipedon</u> )		X			X
American Toad ( <u>Bufo americanus</u> )	X				
Red-backed Salamander ( <u>Plethodon cinereus</u> )		X			
Spring Peeper ( <u>Hyla crucifer</u> )				X	
Green Frog ( <u>Rana clamitans</u> )					X
Wood Frog ( <u>Rana sylvatica</u> )		X			
TOTAL SPECIES: 26	10	10	5	5	6

TABLE 2.1. Habitat Type -- Upland Forest

<u>Evaluation Element</u>	<u>Sample Site</u>		
	<u>1</u>	<u>2</u>	<u>3</u>
White-tailed Deer	6.0	5.3	5.0
Gray Squirrel	5.7	6.3	4.7
Raccoon	4.3	4.0	4.3
Red-tailed Hawk	5.7	6.0	5.7
Downy Woodpecker	7.3	6.0	6.0
Wood Thrush	7.3	5.0	6.7
Black-capped Chickadee	6.7	5.3	5.7
Red-eyed Vireo	6.7	5.0	6.0
Eastern Box Turtle	7.3	5.7	6.3
American Toad	<u>7.0</u>	<u>6.3</u>	<u>6.3</u>
SITE TOTAL	64.0	54.9	56.7

MEAN HABITAT UNIT VALUE/ACRE = 58.5

TABLE 2.2. Habitat Type -- Successional Shrub/Old Field

<u>Evaluation Element</u>	<u>Sample Site</u>		
	1	2	3
Eastern Cottontail	6.3	7.0	5.3
Meadow Vole	4.3	6.0	2.3
American Kestrel	6.0	6.0	3.0
Indigo Bunting	7.0	7.0	5.3
Yellowthroat	<u>5.3</u>	<u>6.7</u>	<u>7.0</u>
SITE TOTAL (X 10/5)	57.8	65.4	45.8

MEAN HABITAT UNIT VALUE/ACRE = 56.3

TABLE 2.3. Habitat Type -- Wooded Swamp

<u>Evaluation Element</u>	<u>Sample Site</u>		
	<u>1</u>	<u>2</u>	<u>3</u>
White-tailed Deer	6.0	6.0	6.7
'Raccoon	6.0	6.3	7.3
Chipmunk	6.0	6.0	5.0
Wood Duck	2.7	3.7	5.0
Red-tailed Hawk	5.0	5.3	5.7
Wood Thrush	6.7	7.3	7.7
Red-eyed Vireo	6.7	7.3	7.3
Wood Frog	6.7	7.3	5.7
Northern Water Snake	3.7	3.7	5.0
Red-backed Salamander	<u>5.0</u>	<u>6.7</u>	<u>5.7</u>
SITE TOTAL	54.5	59.6	61.1
MEAN HABITAT UNIT VALUE/ACRE = 58.4			

TABLE 2.4. Habitat Type -- Shrub Swamp

<u>Evaluation Element</u>	<u>Sample Site</u>	
	<u>1</u>	<u>2</u>
Eastern Cottontail	4.7	4.0
Muskrat	2.3	2.0
Red-winged Blackbird	5.0	5.0
Yellow Warbler	7.7	7.3
Spring Peeper	<u>5.3</u>	<u>4.3</u>
SITE TOTAL (X 10/5)	50.0	45.2
MEAN HABITAT UNIT VALUE/ACRE = 47.6		

TABLE 2.5. Habitat Type -- Marsh

<u>Evaluation Element</u>	<u>Sample Site</u>	
	1	2
Muskrat	2.0	5.3
Great Blue Heron	3.0	4.3
Wood Duck	3.3	3.0
Red-wing Blackbird	4.0	8.0
Northern Water Snake	5.3	6.0
Green Frog	<u>5.7</u>	<u>7.3</u>
SITE TOTAL (X 10/6):	38.9	56.6
MEAN HABITAT UNIT VALUE/ACRE = 47.8		



TABLE 3. Annual Habitat Unit Losses for North Haven Mall based on HEP Team Projections.

Habitat Type	Target Year	Future Without the Project				Future With the Project				Net Effect <sup>1</sup>
		Acres	Habitat Unit Value	Habitat Units	Habitat Unit Change	Acres	Habitat Unit Value	Habitat Units	Habitat Unit Change	Annual Habitat Unit Losses (or Gains (+))
Upland Forest	Existing	17	58.5	994.5		17	58.5	994.5		
	0	17	58.5	994.5	0	17	58.5	994.5	0	
	1	17	58.5	994.5	0	0	0	0	-994.5	
	25	17	58.5	994.5	0	0	0	0	-994.5	
	Annualized Habitat Unit Change				0				-974.6	-974.6
Successional Shrub/ Old Field	Existing	4	56.3	225.2		4	56.3	225.2		
	0	4	56.3	225.2	0	4	56.3	225.2	0	
	1	4	56.3	225.2	0	0	0	0	-225.2	
	25	4	56.3	225.2	0	0	0	0	-225.2	
	Annualized Habitat Unit Change				0				-220.7	-220.7
Wooded Swamp	Existing	8	58.4	467.2		8	58.4	467.2		
	0	8	58.4	467.2	0	8	58.4	467.2	0	
	1	8	58.4	467.2	0	0	0	0	-467.2	
	25	8	58.4	467.2	0	0	0	0	-467.2	
	Annualized Habitat Unit Change				0				-457.9	-457.9
Shrub Swamp	Existing	16	47.6	761.6		16	47.6	761.6		
	0	16	47.6	761.6	0	16	47.6	761.6	0	
	1	16	47.6	761.6	0	0	0	0	-761.6	
	25	8	47.6	380.8	-380.8	0	0	0	-761.6	
	Annualized Habitat Unit Change				-182.8				-746.4	-563.6
Marsh	Existing	1	47.8	47.8		1	47.8	47.8		
	0	1	47.8	47.8	0	1	47.8	47.8	0	
	1	1	47.8	47.8	0	0	0	0	-47.8	
	25	0.5	47.8	23.9	-23.9	0	0	0	-47.8	
	Annualized Habitat Unit Change				-11.5				-46.8	-35.3

<sup>1</sup>Change sign of annualized habitat unit change for without the project and add to annualized habitat unit value with the project.

TABLE 4. Management Potential Unit Values

Habitat Type	HEP Team Projections		
	Baseline	Management Potential	Habitat Units With Management
Upland Forest	58.5	20	78.5
Successional Shrub/ Old Field	56.3	10	66.3
Wooded Swamp	58.4	15	73.4
Shrub Swamp	47.6	25	72.6
Marsh	47.8	15	62.8

TABLE 5. Mitigation Determination

Habitat Type	Management Potential Unit Value	Annualized Habitat Unit Loss	Acres Required
Upland Forest	20	974.6	49
Successional Shrub/ Old Field	10	220.7	22
Wooded Swamp	15	457.9	31
Shrub Swamp	25	563.6	23
Marsh	15	35.3	2
TOTAL			127